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ABSTRACT

A study was conducted to determine the causes contributing to the decline in occupational education enrollments and course offerings in Washoe County, Clark County, and Carson City School Districts in Nevada. Mailed or personally administered surveys were given to a sample of 1,454 high-school students from the school districts. Responses were received from 1,438 of the students, and from 331 parents, 154 teachers, and at least one administrator in each school (a total of 29). Some of the extensive findings were as follows: (1) both parents and students have a generally positive attitude toward vocational education and vocational students; (2) students cited interest in vocational classes as the strongest motivating factor in their enrollment; (3) parents felt that some vocational education would provide everyday or job skills for their children; (4) the majority of parents felt that vocational education was fulfilling its purpose adequately or better; and (5) teachers and administrators reported more positive than negative factors influencing vocational education. Recommendations were made to make vocational education more accessible to students and to market vocational education to students and parents. (This document contains 34 tables, as well as the survey forms and summaries of responses.) (KC)

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CAUSAL ANALYSIS OF REDUCED OCCUPATIONAL EDUCATION ENROLLMENTS AND COURSE OFFERINGS

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This project was conducted under a grant from
the Nevada Department of Education

by

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BACKGROUND AND DESIGN OF THE STUDY

In January of 1988, the Occupational Research Unit (ORU) of the State Department of Education contacted the Research and Educational Planning Center (REPC) of the College of Education, University of Nevada-Reno (UNR) regarding a study to determine causal factors contributing to the decline in occupational education enrollments and course offerings in Washoe County, Clark County, and Carson City School Districts. The purpose of this study was to assist the Occupational Education Branch of the Department of Education in establishing funding priorities and occupational education policies.

There are three outcomes associated with this study. First, the anticipated impact of the project is to provide a rationale for recommending State policies regarding occupational education. Second, information from the study will help determine the relationship between projected enrollments and labor supply demands in order to clarify or reinforce the State Board's focus on increasing occupational education enrollments. Third, survey results will provide individual school districts with information for strengthening their occupational education programs.

PROCEDURES

The following activities were conducted during the study:

1) A letter describing the study and requesting cooperation was sent to Central Office Administrators in Carson City, Clark County, and Washoe County School Districts. Approval for the study was granted. (See Appendix A for letter samples).

2) A sample of students from Carson City, Washoe County, and Clark County School Districts was surveyed through the use of an instrument designed for the study. A sample rate of 5% of the students in grades 10, 11, and 12 was expected. The actual percent of students surveyed in each school district was 6.9% in Washoe County, 5.4% in Clark County, and 5.2% in Carson City. Sampling information for the high school students, parents, administrators and teachers from each school is summarized in Appendix B.

3) With the exception of the three vocational schools--Southern Nevada Vocational Technical Center, Area Technical Trade Center, and the Occupational Center--students were surveyed in a non-tracked academic class to obtain a representative sample of vocational and non-vocational students.

4) Students were identified as vocational if they had taken one or more vocational courses. From the total student sample, 47.5% were vocational and 52.5% were non-vocational. The percentage of vocational students was determined by the total number of respondents answering the question which asked students "What most influenced you to take vocational classes?"

5) Student surveys were mailed to Gerlach, Indian Springs, Boulder City, Moapa Valley, Virgin Valley, Sunset, and Incline Village. In all other cases, students were surveyed on site during the school day. REPC personnel administered student surveys during the regular school day. A copy of the survey is included in Appendix C.

6) Parents of each student participating in the study from Carson City, Clark County, and Washoe County School Districts were also surveyed by mail. One parent survey per household was mailed to each student's address. Student and parents received identical code numbers so comparisons of data could be made. Code numbers identified schools while respondents' names were kept confidential. A 22.8% response

rate was achieved with 331 parents returning surveys. See Appendix D for a copy of the survey.

7) Teacher and Administrator surveys were either mailed, delivered to each school at the time student surveys were conducted, or administered on-site to teachers just before or after the students were surveyed. A minimum of one administrator and all vocational teachers from each school were asked to complete the surveys. See Appendix E & F for teacher and administrator survey forms.

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RESULTS OF THE STUDENT AND PARENT SURVEY

SAMPLE CHARACTERISTICS

Student Demographics. A total of 1,454 sophomore, junior, and senior students from Washoe County, Clark County and Carson City High Schools was surveyed. Sample size for each school district consisted of 462 students from Washoe (32.0% of sample), 912 students from Clark County (63.2% of sample), and 68 students from Carson City (4.7% of sample). Twelve surveys were not included in the above percentages because the students did not identify their school.

Those students who reported gender information totaled 1,438. The number of female student respondents was 740 or 51.5% of the student sample. Male student respondents numbered 698 or 48.5% of the sample. Grade level information was reported by 1,434 students. By grade level, sophomores represented 463 students or 32.3% of the sample, juniors represented 473 students or 33.0% of the sample, and seniors numbered 498 or 34.7% of the sample. Students identified their ethnic background as being 75.5% Caucasian, 8.5% Black, 7.4% Hispanic, 5.3% Asian and 3.4% other. Student representation by district, Ethnic groups, gender and grade level is summarized in Table 1.

Parent Education Levels. Parents were asked to indicate the highest level of education completed in order to determine the relationship between education level and their opinions towards vocational education. Levels of education were denoted by the parents' selection of one of the following: less than 8th grade, 8th grade, 1-3 years high school, high school graduate, trade or vocational school, community college, 1-3 years university, and university graduate.

Of the 331 parents who returned surveys, 30.8% of the parents graduated from high school while 29.7% possessed a college degree. Fifty-five (16.6%) had some university education and 41 (12.4%) had received community college education. A smaller percentage of parents reported having trade or vocational schooling (5.7%), while 4.8% reported having some high school training. See Table 2 for summary of parents' education.

Regional Differences in Parents' Education Levels. The educational background of parents varied by school district. For example, 55.6% of the parents in Carson City, 33.3% from Clark County, and 23.7% residing in Washoe County reported their highest level of education to be high school graduation.

TABLE 1

RESPONDENT CHARACTERISTICS

STUDENT BY DISTRICT	NUMBER OF RESPONDENTS
Clark	912 (63.2%)
Washoe	462 (32.0%)
Carson City	68 (4.7%)
Total	N = 1,442
STUDENT GENDER	
Males	698 (48.5%)
Females	740 (51.5%)
Total	N = 1,438
STUDENT GRADE LEVEL	
Tenth	463 (32.3%)
Eleventh	473 (33.0%)
Twelfth	498 (34.7%)
Total	N = 1,434
STUDENT ETHNIC GROUP	
Caucasian	985 (75.5%)
Blacks	11 (8.5%)
Hispanics	96 (7.4%)
Asians	68 (5.2%)
Other	44 (3.4%)
Total	N = 1,304

TABLE 2

EDUCATION LEVEL OF PARENTS
N=331

LEVEL	FREQUENCY
1-3 Years High School	16 4.8%
High School Graduate	102 30.8%
Trade School	19 5.7%
Community College	41 12.4%
1-3 Years University	55 16.6%
University Graduate	98 29.7%
Total	331

Another difference regarding parents' education was the number of parents from each school district who had college experience. Parents from Washoe County (56.7%), Clark County (41.6%), and Carson City (27.8%) reported their level of education to be some university credit or a university degree.

THE PURPOSE OF VOCATIONAL EDUCATION

Both students and parents were asked to indicate what a vocational education program should emphasize. Respondents were asked to select one of six choices or respond with a written explanation in an "other" category. Student and parent responses to the six survey items are recorded in Table 3.

Student Perceptions. The response favored by the largest number of students (429 or 30.2%) was to give students general skills that can later be used at home or on the job. The second item frequently selected was to prepare students for employment in a specific occupation. This was selected by 411 (28.9%) students. The third choice...to give students an opportunity to explore certain occupational fields...was selected by 401 (28.2%) students. More females (32.2%) than males (23.9%) thought the purpose of vocational education was to explore occupations.

The remaining three responses were chosen by a small percent of the sample. Only 66 (4.6%) students indicated the purpose of vocational education was to prepare students for college; 52 (3.7%) students were of the opinion that vocational education was to give students an alternative to academic classes; and 35 (2.5%) students selected the item ...to prepare students for vocational technical school after high school.

Parent Perception. In comparison with student perceptions, an equivalent number of parents (29.9% vs 28.2%) felt the primary emphasis of vocational education should be to explore certain occupational fields. The second item--to give students general skills that can be used later--was selected by 24.0% of the parents. To prepare students for employment in a specific occupation was selected by fewer parents (18.7% vs 28.9%) than students. More parents (12.5% vs 3.7%) than students selected the choice that vocational education was an alternative to academic classes. A small percentage of the parents felt that vocational education was preparation for technical school (5.6%) and college (5.9%). Table 3 summarizes parents' opinions related to the purpose of vocational education.

TABLE 3

PURPOSE OF VOCATIONAL EDUCATION
RESPONDENTS' OPINIONS
N=1,742

Statement	Students	Parents	Total
To give students an opportunity to explore certain occupational fields.	401 28.2%	96 29.9%	497 28.5%
To give students general skills that can later be used at home or on the job.	429 30.2%	77 24.0%	506 29.0%
To prepare students for employment in specific field.	411 28.9%	60 18.7%	471 27.0%
To give students an alternative to to academic classes.	52 3.7%	40 12.5%	92 5.3%
To prepare students for vocational technical school after high school.	35 2.5%	18 5.6%	53 3.0%
To prepare students for college.	66 4.6%	19 5.9%	85 4.9%
Other	27 1.9%	11 3.4%	38 2.2%
Total	1,421	321	1,742

Regional Differences in Parents' Perceptions. Parents from each school district had similar perceptions about the purpose of vocational education. Only one item, preparation for vocational technical school, revealed a larger than 10% difference in responses. Carson City parents (16.7%) more often than Washoe County (5.1%) or Clark County (4.0%) perceived the primary emphasis of vocational education to be preparation for technical school.

RECOMMENDATION OF VOCATIONAL COURSE ENROLLMENT

Student Reasons for Recommending Vocational Course Enrollment. Parents and students were asked, "Would you recommend that all students take at least one vocational course during high school?" A majority of the students (76.1% of the 1,420 students who answered this item) recommended that students take a vocational course. A total of 936 students stated reasons for recommending vocational education. These justifications, listed in order, were summarized into the following nine categories:

1. To learn everyday skills/general preparation for future
2. For career exploration
3. For job or career preparation
4. To acquire new skills or improve existing skills
5. To diversify or broaden educational background
6. To gain work or job experience
7. For preparation of alternative job skills
8. To prepare for college
9. To enroll in an easy or fun class

Of the 936 students, almost half of the respondents supported two reasons: to learn everyday skills/general preparation for the future (28.5%) and career exploration (19.9%). More than one-third of the students recommended vocational enrollments to diversify or broaden their educational background (9.7%), to acquire or improve skills (10.6%), and as job or career preparation (15.8%). Table 4 summarizes the students' recommendations.

Regional Differences in Students' Recommendations. Students from the three school districts emphasized different reasons for recommending vocational courses. Washoe County (33.9%) and Clark County (26.6%) students selected to learn everyday skills/ preparation for the future as the primary reason for recommending vocational courses. Carson City students (39.0%) cited career exploration as the most popular reason for recommending vocational education.

TABLE 4

STUDENT REASONS FOR RECOMMENDING
VOCATIONAL COURSES
N=(936)

REASONS	WASHOE	CLARK	CARSON	TOTAL
To learn every day skills/general preparation for future.	101 33.9%	159 26.6%	7 17.1%	267 28.5%
For career exploration.	60 20.1%	110 18.4%	16 39.0%	186 19.9%
To diversify or broaden their educational background.	29 9.7%	60 10.1%	2 4.9%	91 9.7%
For prepare for alternative jobs	8 2.7%	44 7.4%	1 2.4%	53 5.7%
For job or career preparation.	37 12.4%	105 17.6%	6 14.6%	148 15.8%
To prepare for college.	3 1.0%	21 3.5%	2 4.9%	26 2.8%
To gain work or job experience.	14 4.7%	38 6.4%	3 7.3%	55 5.9%
To acquire or improve skills.	40 13.4%	56 9.4%	3 7.3%	99 10.6%
To enroll in an easy or fun class.	6 2.0%	4 .7%	1 2.4%	11 1.2%
Total	298	597	41	936

Although not determined by the survey results, differences in student opinions may be influenced by the schools' recruitment practices, guidance policies, or vocational education philosophy. See Table 4 for the distribution of students' stated reasons by school district.

Parent Reasons for Recommending Vocational Course Enrollment. Slightly more parents than students (82.3% vs 76.1%) advocated enrollment in at least one vocational course. A total of 327 parents responded to this item with 269 parents making the recommendation that students pursue at least one vocational course. Carson City parents demonstrated the strongest support when 17 of the 18 respondents recommended students enroll in a vocational course.

A total of 145 parents stated reasons for recommending vocational education. The reasons, listed in order, were summarized into the eight categories listed below:

1) Exploration of careers
2) General preparation for future
3) Learn job skills
4) Broaden students' education
5) Gainful employment after high school
6) Expand skills through practical skill application
7) Learn employability skills-good work habits
8) Prep for college bound

Although, the support for each recommendation varied, it should be noted that the same first three choices were selected by both parents and students. See Table 5 for frequency of parents' reasons for recommending vocational education.

Regional Differences in Parents' Recommendations. Exactly one-third of the Carson City parents who stated reasons were of the opinion that students should take vocational courses to learn job skills. The reason stated most frequently by Washoe County (29.8%) and Clark County (29.1%) parents, was exploration of careers.

Student Reasons for NOT Recommending Vocational Courses. Approximately 340 (24.0%) of the 1,420 student who responded to this item, did not recommend that all students take at least one vocational course. Written explanations for not recommending vocational enrollments were given by 285 (83.8%) of the 340 students. The reasons, listed in order, for not recommending vocational enrollments were categorized as follows:

TABLE 5

PARENT REASONS FOR RECOMMENDING
VOCATIONAL COURSES
N=145

REASONS	WASHOE	CLARK	CARSON	TOTAL
Career Exploration	14 29.8%	25 29.1%	3 25.0%	42 29.0%
General Preparation for the future.	8 17.0%	22 25.6%	1 8.3%	31 21.4%
Learn new job skills	9 19.2%	17 19.8%	4 33.3%	30 20.7%
Broaden Students' Education	7 14.9%	10 11.6%	1 8.3%	18 12.4%
Gainful employment after high school	4 8.5%	7 8.1%	1 8.3%	12 8.3%
Expand skills through Practical skill application	3 6.4%	2 2.3%	1 8.3%	6 4.1%
Learn employability skills good work habits	1 2.1%	3 3.5%	1 8.3%	5 3.4%
Preparation for college bound	1 2.1%	0 0.0%	0 0.0%	1 .7%
Total	47	86	12	145

1. Students should have flexibility to choose
2. Not necessary for students' future plans
3. Lack of students' interest
4. Lack of students' time
5. Not necessary for college bound students
6. Vocational courses are not as important
7. Other

A total of 35.1% of the students felt that students should have the flexibility to choose. Other students (31.9%) thought vocational courses may not be necessary for students' future plans. A third reason indicated by students (20.0%) was students' lack of interest in vocational courses. A summary of all reasons can be seen in Table 6. Of these three reasons, the most significant one given is the students perception that vocational courses were not necessary for their future plans. This seems to indicate a lack of understanding on the part of the student for the requirements needed as an adult worker regardless of career or college choice.

Regional Differences in Students' Reasons for NOT Recommending Vocational Courses. Students in each school district selected different reasons for not recommending vocational courses. The reason stated most often by exactly 50.0% (8) of the Carson City students and 38.8% (33) of the Washoe County students was students should have the flexibility to choose their courses. An equal number of Clark County students (32.1% or 59) favored two reasons—not necessary for students' future plans and students should have the flexibility to choose. See Table 6 for the distribution of reasons by school district.

Parents' Reasons for NOT Recommending Vocational Course Enrollment. Parents who did not recommend that students take at least one vocational course stated their reasons accordingly:

1) Students should have flexibility to choose courses
2) Not necessary for college bound students
3) Not necessary for students' chosen career
4) Lack of students' time
5) Lack of students' interest

Only 43 parents (13 from Washoe County, 29 from Clark County, and one from Carson City) provided written responses to this question. Approximately 39.5%

TABLE 6

STUDENTS' REASONS FOR NOT RECOMMENDING VOCATIONAL COURSES
N=285

REASONS	WASHOE	CLARK	CARSON	TOTAL
Students should have flexibility to choose	33 38.8%	59 32.1%	8 50.0%	100 35.1%
Not necessary for students' future plans	29 34.1%	59 32.1%	3 18.8%	91 31.9%
Student lack of interest	15 17.6%	39 21.2%	3 18.8%	57 20.0%
Student lack of time	2 2.4%	12 6.5%	0 0.0%	14 4.9%
Not necessary for college bound students	3 3.5%	6 3.3%	1 6.2%	10 3.5%
Vocational courses are not as important	2 2.4%	5 2.7%	1 6.2%	8 2.8%
Other	1 1.2%	4 2.2%	0 0.0%	5 1.8%
Total	85	184	16	285

(17) of the parents who provided explanations felt all students should not take vocational courses because students should have the flexibility to choose. More than one-fourth (27.9%) of the parents indicated that vocational courses were not necessary for the college bound student. A third reason--vocational course enrollments were not necessary for students' chosen career--was supported by 16.3% of the parents. Lack of students' time and interest were stated reasons given by 9.3% and 7.0% of parents, respectively. A summary of parents' reasons can be seen in Table 7.

ATTITUDE TOWARD VOCATIONAL STUDENTS

Parents and students were asked to select a statement that represented their opinion of students who take vocational courses. Respondents could choose from the following five statements: 1) Will be better prepared for work in the future; 2) Will have a broader educational background; 3) Will have less academic ability than students who do not take vocational courses; 4) Will not be as well prepared for college; and, 5) There is no real difference between students who take vocational classes and those who do not.

Students' Perceptions of Students Who Enroll in Vocational Courses. The results from this survey item indicate that the majority of students have a positive perception of students enrolled in vocational courses. A total of 1,413 students responded to this item. Almost half of the students (48.9%) thought that those who took vocational courses would be better prepared for work in the future. A significant number of students (27.7%) felt that vocational coursework would broaden their educational background. Some students (16.9%) felt there was no difference between vocational and non-vocational students. The remaining 92 (7.5%) students indicated that vocational students had less academic ability or would not be as well prepared for college. See Table 8 for student and parent responses regarding attitudes toward vocational students.

Parents' Perceptions of Students Who Enroll in Vocational Courses. Parents' attitudes toward vocational students were also favorable. Approximately 40.4% of the 314 parents who responded felt that students would be better prepared for jobs. The opinion that vocational students would have a broader education was selected by 35.7% of the parents. Nine parents (9.2%) felt there was no difference between vocational and non-vocational students. Less favorable responses from parents were apparent when 7.3% opined that

TABLE 7

PARENTS' REASONS FOR NOT RECOMMENDING
VOCATIONAL COURSES
N=43

REASONS	WASHOE	CLARK	CARSON	TOTAL PARENTS
Students should have flexibility to choose courses	4 30.8%	12 41.4%	1 100%	17 39.5%
Not necessary for college bound students	6 46.1%	6 20.7%	0 0.0%	12 27.9%
Not necessary for students chosen career	1 7.7%	6 20.7%	0 0.0%	7 16.3%
Lack of students interest	1 7.7%	2 6.9%	0 0.0%	3 7.0%
Lack of students time	1 7.7%	3 10.3%	0 0.0%	4 9.3%
Total	13	29	1	43

TABLE 8

ATTITUDES TOWARD VOCATIONAL STUDENTS
RESPONDENTS' OPINIONS
N=1,727

STATEMENT	STUDENTS RESPONSES	PARENTS RESPONSES	TOTAL RESPONSES
Students who take vocational courses:			
Will be better prepared for work in the future	691 48.9%	127 48.4%	818 47.4%
Will have a broader educational background	391 27.7%	112 35.7%	503 29.1%
Have less academic ability than non-vocational students	49 3.5%	23 7.3%	72 4.2%
Will not be as well prepared for college	43 3.0%	23 7.3%	66 3.8%
There is no difference between vocational and non-vocational students	239 16.9%	29 9.2%	268 15.5%
Total	1,413	314	1,727

vocational students had less academic ability, and another 7.3% felt they would be less prepared for college.

A comparison of parents' perceptions about vocational students and the primary emphasis of vocational courses revealed that parents who perceive vocational education as preparation for technical school or learning specific skills felt vocational students would have better job preparation. Approximately half of the parents who indicated that vocational education gave students an opportunity to explore careers, to develop general skills, or to provide an alternative to academic skills felt that vocational students would have a broader education. See Table 9 for cross tab comparisons of parents' perceptions of vocational education and students.

ENCOURAGEMENT TO ENROLL IN COLLEGE PREPARATORY OR VOCATIONAL COURSES

Approximately 63.3% (891) of the 1,407 students answered affirmatively when responding to the question "I get more encouragement to pursue college preparatory course than vocational courses". A higher percentage of Clark County students (66.0%) and Asian students (82.1%) received more encouragement to enroll in college preparatory courses. However, 728 students (51.1%) answered that they had been advised about enrolling in vocational classes. More sophomores (56.0%) and juniors (54.6%) than seniors (42.9%) and a larger percentage of Clark County students (54.2%) than students from other schools received this encouragement. Only 16.1% of the students reported receiving discouraging advise to enroll in vocational courses.

Sources of Encouragement for Vocational Course Enrollment. Students were given the following choices in identifying the individual who provided encouragement to pursue vocational courses: 1) teacher, 2) counselor, 3) principal, 4) parent(s), 5) student, 6) a friend, 7) representatives from vocational schools, and 8) other. People given credit for advisement most often were parents (30.2%) and counselors (27.9%). Fellow students were credited for course advisement 13.5% of the time and teachers approximately 10.3% of the time. Forty-seven (6.6%) students were advised by representatives from vocational schools making a presentation and 63 (8.8%) students indicated "other". Only 15 (2.1%) students were advised by a friend and four (0.6%) students by a principal.

TABLE 9

CROSS TABULATION OF PARENTS PERCEIVED PURPOSES OF VOCATIONAL EDUCATION BY ATTITUDES TOWARD VOCATIONAL STUDENTS
N = 297

VOCATIONAL EDUCATION PURPOSE	BETTER JOB PREPARATION	BROADER EDUCATION	LESS ACADEMIC ABILITY	LESS COLLEGE PREPARATION	NO DIFFERENCE	TOTAL
OPTION TO EXPLORE CAREER	29 32.2%	41 45.6%	6 6.7%	3 3.3%	11 12.2%	90 30.3%
DEVELOPMENT OF GENERAL SKILLS	26 34.2%	35 46.1%	3 3.9%	5 6.6%	7 9.2%	76 25.6%
DEVELOPMENT OF SPECIFIC SKILLS	44 77.2%	4 7.0%	2 3.5%	5 8.8%	2 3.5%	57 19.2%
ALTERNATIVE TO ACADEMIC COURSES	10 25.0%	19 47.5%	3 7.5%	5 12.5%	3 7.5%	40 13.5%
PREPARATION FOR VOCATIONAL TECHNICAL TRAINING	8 50.0%	3 18.8%	3 18.8%	1 6.3%	1 6.3%	16 5.4%
PREPARATION FOR COLLEGE	4 22.2%	5 27.8%	2 11.1%	3 16.7%	4 22.2%	18 6.1%
TOTAL	121	107	19	22	28	297

PLANS AFTER HIGH SCHOOL

Students were given a choice of five responses to reveal their plans after high school graduation. The possible responses were: 1) get a job, 2) attend a trade school, 3) attend a community college, 4) attend a four-year college, and 5) enlist in the military. Many students indicated a combination of two choices, such as get a job and go to school. Responses were coded into nine categories. Table 10 summarizes the students' plans after high school.

A total of 1,419 students indicated their plans after high school by responding to this survey item. Approximately 50.2% of the students planned to attend a four year college. An additional 155 students (10.9%) checked multiple choices with four year college as one of the items checked. A total of 80.0% of the students had future plans for attending trade school, community college, or four year college. Getting a job or joining the military was chosen by 15.6% of the students.

Regional Differences in Students' Plans After High School. The survey results revealed more similarities than differences when comparing students plans after high school. The main difference between students in each school was their interest in attending a four year college versus community college. Approximately half of the Washoe County (48.8%) and Clark County (52.5%) students expressed an interest in attending a four-year college with a smaller percent of Carson City students (28.4%) indicating similar plans. A larger percent of students residing in Carson City (34.3%) than Washoe County (19.8%) or Clark County (17.3%) had plans to attend trade school or community college after high school.

OCCUPATIONAL OR CAREER CHOICES OF STUDENTS

Students were asked to identify a specific occupation they wished to pursue after high school or college education. Of the 1,426 students responding to this survey item, approximately 23.2% were undecided or did not specify a specific choice. Career choices of students were coded using categories from the "Occupational Outlook Handbook". Career choices of students by gender are recorded in Table 11.

The most frequent career category selected by 10.0% of the students was "Social Scientists, Social Workers, Religious Workers, and Lawyers." Students who selected the occupations of lawyers, psychologists, social workers, and sociologists were placed in this category.

TABLE 10

PLANS AFTER HIGH SCHOOL GRADUATION
N=1,419

DISTRICT RESPONDENT POST HIGH SCHOOL PLANS	WASHOE	CLARK	CARSON	TOTAL
Get a job	48 10.5%	80 8.9%	8 11.9%	136 9.6%
Attend a trade school	28 6.2%	66 7.4%	9 13.4%	103 7.3%
Attend a community college	62 13.6%	89 9.9%	14 20.9%	165 11.6%
Attend a four-year college	222 48.8%	471 52.5%	19 28.4%	712 50.2%
Enlist in the military	22 4.8%	59 6.6%	4 6.0%	85 6.0%
Job and college	47 10.3%	75 8.4%	6 9.0%	128 9.0%
Community college and four year college	8 1.8%	13 1.4%	2 3.0%	23 1.6%
Trade school and college	3 .7%	1 .1%	0 0%	4 .3%
Other	15 3.3%	43 4.8%	5 7.5%	63 4.4%
Total	455	897	67	1,419

TABLE 11

CATEGORICAL CAREER CHOICES BY STUDENT GENDER
N=1,426

	MALE	FEMALE	TOTAL
Executive, Administrative, Managerial	28(4.1%)	36(4.9%)	64 (4.5%)
Management Support	22(3.2%)	27(3.7%)	49 (3.4%)
Teachers, Counselors, Librarians, Archivists, Curators	8 (1.2%)	49(6.6%)	57 (4.0%)
Writers, Artists, Entertainers	49(7.1%)	85(11.5%)	134 (9.4%)
Social Scientists, Social Workers, Religious Workers, and Lawyers	40(5.8%)	102(13.8%)	142(10.0%)
Natural Scientists and Mathematicians	16(2.3%)	17(2.3%)	33 (2.3%)
Engineers, Surveyors and Architects	57(8.3%)	16(2.2%)	73 (5.1%)
Technologists and Technicians	51(7.4%)	13(1.8%)	64 (4.5%)
Health Diagnosing and Treating Practitioners	17(2.5%)	26(3.5%)	43 (3.0%)
RN's, Pharmacists, Dieticians, Therapists	12(1.7%)	37(5.0%)	49 (3.4%)
Health Technologists, and Technicians	2 (.3%)	12(1.6%)	14 (1.0%)
Service Occupations (Protective Food and Beverage Health and Personal)	35(5.1%)	70(9.5%)	105 (7.4%)
Marketing and Sales	32(4.6%)	42(5.7%)	74 (5.2%)
Administrative and Support	11(1.6%)	56(7.6%)	67 (4.7%)
Mechanics and Repairs	33(4.8%)	2 (.3%)	35 (2.5%)
Production	15(2.2%)	0	15 (1.1%)
Transportation and Material Moving	10(1.4%)	2 (.3%)	12 (.8%)
Agricultural Forestry, Fishing	4 (.6%)	0	4 (.3%)
Construction and Extractive	27(3.9%)	0	27 (1.9%)
Military	26(3.8%)	8 (1.1%)	34 (2.4%)
Unspecified/undecided	195 (28.3%)	136(18.5%)	331(23.2%)
Total	690	736	1,426

The second most frequent career category chosen by 9.4% of the students was "Writers, Artists, and Entertainers." Examples of selected careers from this category were designers, artists, or communication specialists.

The third most frequent career category selected by 7.4% of the students was "Service Occupations" which included sub-categories of Protective Services, Food and Beverage Preparation and Services, Health Services, Cleaning Services, and Personal Services occupations. More student interest was expressed in Health and Personal Services than the other sub-categories.

Categories of "Marketing and Sales" and "Engineers, Surveyors, and Architects" were the career choices of 5.2% and 5.1% of the students, respectively. Each of the remaining categories were selected by fewer than 5% of the students.

Gender Differences in Career Choices. Sex differences in career choices were observed, suggesting that student selection of careers may be based on traditional male/female roles. An imbalance between males and females occurs for more than half of the chosen careers. Male students indicated more often than females an interest in careers such as mechanics, architecture, engineering, technology, construction and military. Female students showed a greater interest in becoming nurses, secretaries, typists, teachers, social workers and health technicians.

CAREER EDUCATION IN THE SCHOOL

A total of 1,390 students responded to the question, "Have you taken a required class which helped you learn about career choices?" The majority of the students (65.8%) stated that REQUIRED classes had not helped them learn about career choices. By school district, 74.4% of Washoe County students, 61.2% of Clark County students and 69.7% of Carson City students indicated not receiving career information in the required classes. Without specific knowledge about work and employment trends, it is difficult for students to make career plans. Although information about careers can be acquired from many different sources, schools can assume an active role in helping students gain knowledge, attitudes, and skills for employment. Knowledge about the work world promotes better course and curriculum choices by students, as well.

Seniors (39.5%) more often than sophomores (28.8%) and juniors (34.0%) reported receiving career information in required classes. This suggests that the exposure to career information occurs as a function of a student's

perceived readiness and need. For example regardless of the subject, teachers of graduating students may feel compelled to provide appropriate information related to future career requirements.

NON-VOCATIONAL STUDENTS' PERCEPTIONS OF VOCATIONAL EDUCATION

Reasons for not Participating in Vocational Education Courses. Non-vocational students were asked to state the reason for deciding not to take vocational classes. A total of 656 students completed this survey question. Over half (57.0%) of the non-vocational students stated that lack of interest was the reason for not enrolling in vocational courses. By district, non-vocational students from Washoe County (47.7%), Clark County (60.2%), and Carson City (63.6%) indicated lack of interest as the reason for not enrolling in vocational courses.

Not enough time and didn't know about vocational courses were reasons given by 23.8% and 15.2% of the students from all school districts, respectively. Washoe County students (33.5%) indicated lack of time more often than those from Clark County (20.6%) and Carson City (15.2%). More males than females (64.4% vs 50.3%) indicated lack of interest and more females than males (27.5% vs 19.9%) indicated lack of time as influential factors preventing them from enrolling in vocational courses. Very few students felt their parents' objections or advisement was a factor against taking a vocational course. See Table 12 for summary of reasons.

Vocational Course Options. Non-vocational students were also asked if they would enroll in a vocational course if it was: 1) offered for science credit; 2) offered for math credit; 3) offered during the summer; or, 4) offered after school hours. Over half (68.7%) of the 681 students who responded to this item would take a vocational course if it was offered for math or science credit. About half of Carson City respondents (48.4%) were interested in obtaining science credit for vocational courses. The third alternative selected by 17.5% of the students was if the course was offered during summer school. Offering the class after school hours was the least favored with 13.8% selection.

VOCATIONAL STUDENTS' PERCEPTIONS OF THEIR EDUCATION

Membership in Vocational Organizations. Students who had taken one or more vocational classes were asked to share their opinions about vocational organizations. Of those who responded, 40.2% had been members of a vocational

TABLE 12

STUDENTS' REASONS FOR NOT PARTICIPATING
IN VOCATIONAL EDUCATION
N=656

REASON	WASHOE	CLARK	CARSON	TOTAL
I did not know about vocational classes	33 18.8%	62 13.9%	5 15.2%	100 15.2%
My parents were against it	0 0.0%	18 4.0%	1 3.0%	19 2.9%
I did not have enough time	59 33.5%	92 20.6%	5 15.2%	156 23.8%
I was not interested	84 47.7%	269 60.2%	21 63.6%	374 57.0%
Someone at school advised against it	0 0.0%	6 1.3%	1 3.0%	7 1.1%
Total	176	447	33	656

organization. The percentage of students who reported membership to vocational organizations were 44.7% from Washoe County, 37.8% from Clark County, and 35.9% from Carson City. Approximately 89.3% of the students felt the organization had been beneficial.

Factors Influencing Vocational Enrollment. A survey item asked vocational students to specify "What most influenced you to take vocational classes?" A total of 690 (47.5%) students responded to this item. Approximately 41.3% of these students enrolled because they were interested in vocational classes. Another 20.0% of the students thought vocational course would prepare them for college; 14.7% thought it would be easier to get a job after graduation; and 9.7% took vocational courses because they wanted to get out of taking other classes. The remaining 14.3% of the students were encouraged by parents or school personnel to enroll in vocational courses. Data on factors influencing student decisions regarding vocational enrollments are listed in Table 13.

Level of Difficulty, Interest, and Learning in Vocational Courses. Vocational students were asked to compare vocational courses with other courses on the level of difficulty, level of interest, and learning outcomes associated with each using a five point rating scale. For level of difficulty, approximately one third of the students (34.6% or 263) rated their vocational courses "easier" or "much easier". Almost half of the students (48.6% or 369) thought the classes were about the "same difficulty" level. The remainder of students (16.9% or 128) felt that vocational courses were "more difficult."

Ratings on interest level were favorable for vocational courses. Students (63.8% or 486) rated the courses as being "more interesting" or "much more interesting" than other courses. Less than one third of the students (28.8% or 219) rated the course as being about the "same interest" level. Only 7.3% or 56 students were of the opinion that vocational courses were "much less interesting" or "less interesting."

Students (57.0%) reported level of learning to be "more" or "much more" in vocational courses than in other high school classes. Approximately 35.9% or 273 of the students indicated learning about the same while 7.1% or 54 students reported learning less. See Table 14 for a summary of the students ratings of vocational courses.

PARENTS' ATTITUDES ABOUT THEIR CHILDS PARTICIPATION IN VOCATIONAL EDUCATION

Parents were asked to express the relevance of vocational education to

TABLE 13

FACTORS INFLUENCING
VOCATIONAL ENROLLMENT
N=690

STATEMENT	STUDENT RESPONDENTS ABSOLUTE FREQUENCY	STUDENT RESPONDENTS RELATIVE FREQUENCY
My parents wanted me to take vocational classes.	45	6.5%
A counselor, teacher, or principal advised me to take vocational classes.	54	7.8%
I thought that it would be easier to get a job after graduation if I took vocational classes.	101	14.7%
I wanted to get out of taking other classes.	67	9.7%
I thought they would help prepare me for college.	138	20.0%
I was interested in vocational classes.	285	41.3%
Total	690	100%

TABLE 14

STUDENT RATINGS OF THEIR VOCATIONAL COURSES

When you compare your vocational class(es) to most other high school classes, how would you rate them? (circle one for each).

Level of:

	1	2	3	4	5
Difficulty N=(760)	**Much Easier**		**About the Same**		**Much more Difficult**
	139	124	369	82	46
	18.3%	16.3%	48.6%	10.8%	6.1%

	1	2	3	4	5
Interest Level N=(761)	**Much Less Interesting**		**About the Same**		**Much More Interesting**
	27	29	219	178	308
	3.5%	3.8%	28.8%	23.4%	40.5%

	1	2	3	4	5
Learning Outcome N=(761)	**I Learned Much Less**		**I Learned About the Same**		**I Learned A Lot More**
	23	31	273	159	275
	3.0%	4.1%	35.9%	20.9%	36.1%

their sons or daughter's education. Parents could select one of seven statements or add comments. See Table 15 for parent responses.

A majority of the parents selected statements indicating that vocational education was beneficial. One-third of the 313 parents who responded felt that vocational education provides skills for use in everyday life or the world of work. Parents perceived vocational education to provide a broader educational experience (17.6%) and a means to finance an education (16.0%). Very few parents (5.1%) felt that vocational training was necessary to start a job after school. Parents may view vocational training and education as on-going rather than something that is completed upon high school graduation. Written comments from this survey item reinforces the perceived benefits of vocational education. See Appendix G for parent statements.

Forty-five parents (14.3%) selected responses which indicated vocational education was not appropriate for their child. Those parents felt that vocational courses would interfere with the academic program (7.0%) or would not be appropriate for career plans (7.3%). Other parents (8.6%) were of the opinion that a more in-depth vocational program was essential for their child's needs.

Parents' Attitudes about Vocational Education in Relationship to Child's Gender. More parents of male students (11.0%) than female students (4.9%) felt that their sons' participation in vocational courses was not appropriate for their future plans. Parents of female students (18.5%) were more favorable than parents of male students (10.3%) toward their child's vocational education because it facilitated potential earning capacity to subsidize a college education. Parents of females students (7.4%) more than parents of male students (2.2%) also thought vocational training was essential for job placement after high school.

PARENTS' PHILOSOPHICAL ATTITUDES ABOUT VOCATIONAL EDUCATION

Parents' philosophical attitudes about vocational education were obtained from their reactions to nine statements on the survey. Each statement was rated by parents using the following scale: 1) strongly disagree; 2) disagree; 3) undecided; 4) agree; and, 5) strongly agree.

Average mean scores suggest that parents as a group had a tendency toward "agreement" ranking with most statements. The four statements receiving strongest support were: 1) vocational courses should be offered in the summer (mean score 3.97); 2) students should be allowed to satisfy high school

TABLE 15

HOW PARENTS FEEL ABOUT THEIR CHILD'S PARTICIPATION IN VOCATIONAL EDUCATION
N=313

STATEMENTS	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (%)
My child needs the training to start a job after high school.	16	5.1%
Vocational education will give my child a broader educational experience.	55	17.6%
I want (wanted) my child to take as many academic courses as possible without other courses taking time away from academics.	22	7.0%
My child has preparation for a professional career ahead and vocational education is or was not appropriate.	23	7.3%
My child is going on for more schooling and vocational education will help him/her find a better job to help finance the education.	50	16.0%
I feel that some vocational education is (was) appropriate for my child to provide skills for use in everyday life or world of work.	104	33.2%
Vocational education for my child requires a more in-depth program than that now offered.	27	8.6%
Other (see appendix)	16	5.1%
Total	313	100%

graduation requirements with selected courses in vocational education (mean score 3.92); 3) tracking students with vocational education would decrease drop-out rates (mean score 3.80); and, 4) courses labeled "occupational" can provide vocational preparation for students who work in many fields (mean score 3.80). Average ratings for all parents can be seen in Table 16.

Regional Differences in Vocational Education Philosophy. Carson City parents had a mean score of 4.0 or more on two statements: 1) Vocational education should be required for those who don't go to college; and, 2) Tracking students in vocational education programs would decrease drop-out rates. Clark County parents more than others indicated stronger "Agreement" (4.05) with the statement that "Students should be allowed to satisfy high school graduation requirements with selected courses in vocational education." Washoe County parents indicated the highest agreement with "Vocational courses should be offered in the summer" with a average rating of 4.05. Table 17 summarizes parent perceptions by school district.

ADEQUACY OF VOCATIONAL EDUCATION

Parents were asked to rate how well the schools were performing relative to accomplishing the purpose they felt schools should be emphasizing most in vocational education. Purposes to be evaluated were: 1) exploration of careers, 2) develop skills for use at home and on the job; 3) prepare students for employment in specific occupations; 4) provide alternatives to academic classes; 5) prepare students for technical school; and, 6) prepare students for college. Overall, parents rated how well schools were meeting each purpose using a five point scale ranging from "Very well" to "Very poorly" with a sixth option of responding "No opinion/don't know". A total of 322 parents responded with 62 (19.3%) parents selecting the option of "No opinion/don't know". Fifty percent of the remaining parents provided the following ratings: adequate (28.6%), fairly well (16.1%), and very well (5.3%) in meeting the purposes of vocational education. Ratings of poorly (23.6%) and very poorly (7.1%) were indicated by less than a third of the parents.

Regional Evaluations of Vocational Education. In Carson City and Clark County School Districts, twice as many parents rated the schools as "adequate" to "very well", in comparison to parents who rated schools as doing " poor" to "very poor" in meeting the purpose of vocational education. A comparison of rating frequencies by Washoe County parents indicates that for every four

TABLE 16

VOCATIONAL EDUCATION PHILOSOPHY
PARENT RESPONSES
N=313
1=STRONGLY DISAGREE - 5=STRONGLY AGREE

	MEAN SCORE
Vocational education should be required for those who don't go to college.	3.68
Students should be allowed to satisfy high school graduation requirements with selected courses in vocational education.	3.92
Males and females have equal access to and are recruited for vocational course offerings.	3.68
Students get more encouragement to pursue college preparatory courses than vocational classes.	3.71
Courses that are labeled "occupational" can provide vocational preparation for students who work in many fields.	3.80
Graduation requirements should be double-tracked to accommodate college and vocational-bound students.	3.78
Vocational courses should be offered in the summer.	3.97
Tracking students with vocational education programs would decrease drop-out rates.	3.80
Vocational education should be required for high school students.	3.10

TABLE 17

VOCATIONAL EDUCATION PHILOSOPHY
PARENT RESPONSES BY SCHOOL DISTRICT
N=313

	WASHOE	CLARK	CARSON
Vocational education should be required for those who don't go to college.	3.61	3.66	**4.17**
Students should be allowed to satisfy high school graduation requirements with selected courses in vocational education.	3.72	**4.05**	3.72
Males and females have equal access to and are recruited for vocational course offerings.	3.78	3.59	3.83
Students get more encouragement to pursue college preparatory courses than vocational classes.	3.74	3.71	3.50
Courses that are labeled "occupational" can provide vocational preparation for students who work in many fields.	3.79	3.79	3.89
Graduation requirements should be double-tracked to accommodate college and vocational-bound students.	3.78	3.76	3.81
Vocational courses should be offered in the summer.	**4.05**	3.91	3.78
Tracking students with vocational education programs would decrease drop-out rates.	3.67	3.82	**4.12**
Vocational education should be required for high school students.	2.83	3.21	3.39

parents who rated schools as doing "adequate" to "very well" there were three "poor" and "very poor" ratings.

Evaluation of Vocational Education by Perceived Purpose. Table 18 pairs parents perceptions of what the schools should be pursuing for vocational education with how well the schools are meeting each purpose. "No opinion" responses (19.7 %) are also included in the table. The data in Table 18 indicates that parents rated schools as adequate more than other ratings "in exploring occupational fields", "providing general skills for home or on the job", "providing alternatives to academic classes", and "preparing students for college." Those parents who selected "preparation for employment" in a specific field and "preparation for technical school" rated the schools as doing an adequate to poor job. Written explanations for the ratings were provided by some parents. See Appendix H for list of parent comments.

TABLE 18

CROSS TABULATION OF PARENTS' OPINIONS
THE PRIMARY EMPHASIS OF VOCATIONAL EDUCATION BY
HOW WELL THE SCHOOLS ARE MEETING THAT EMPHASIS
N = 304

STATEMENT	VERY WELL	FAIRLY WELL	ADEQUATE	POOR	VERY POOR	NO OPINION/ DON'T KNOW	ROW TOTAL
Opportunities for exploration of occupational fields	6 6.4%	17 18.1%	29 30.9%	23 24.5%	4 4.3%	15 16.0%	94 29.8%
Give students general skills for use at home or on the job	3 3.9%	16 21.1%	23 30.3%	19 25.0%	1 1.3%	14 18.4%	76 24.1%
Prepare student for employment in specific occupations	3 5.2%	9 15.5%	13 22.4%	13 22.4%	8 13.8%	12 18.4%	58 20.7%
Give students alternatives to academic classes	1 2.5%	5 12.5%	12 30.0%	9 22.5%	4 10.0%	9 22.5%	40 12.7%
Prepare students for tech school after high school	1 5.9%	1 5.9%	4 23.5%	4 23.5%	0 0.0%	7 41.2%	17 5.4%
Prepare students for college	2 10.5%	4 21.1%	6 31.6%	9 15.8%	1 5.8%	3 15.8%	19 6.0%

RESULTS OF THE ADMINISTRATOR AND TEACHER SURVEY

RESPONDENT CHARACTERISTICS

A total of 29 administrators and 154 teachers completed and returned the surveys. Representation from each school district, excluding six respondents from unidentified schools, was as follows: Carson City (6.2% or 11), Washoe County (32.8% or 58), and Clark County (61% or 108). Twelve administrators from Northern Nevada and 17 administrators from Southern Nevada returned surveys.

Teachers who had earned Masters degrees (61.5%) outnumbered those with Bachelors degrees. Licenses held by teachers were as follows:

CERTIFICATION	NUMBER
HERO	2
Home Economics	21
Business	46
Vocational Business	2
Industrial Arts	34
Trade and Industry	12
Marketing and Distribution	2
Vocational Counseling	1
Vocational Special Needs	8
Agriculture	5
Secondary Vocational Education	11
Vocational Administration	3
Academic Subject Area	2
General Counseling	1
Unspecified	4

The teachers had the following teaching assignments: 5 in Agriculture, 54 in Business, 3 in Marketing, 21 in Home Economics, 2 in HERO, 31 in Industrial Arts, 10 in Pre-occupational Employment Skills, and 21 in Trade and Industry. Seven respondents did not specify teaching assignments.

Approximately 73.3% of the teachers had nine or more years of teaching experience and 63.4% had taught occupational education courses for that same period of time. Of all the teacher respondents, most (79.3%) had full time vocational teaching responsibilities.

Both administrators and teachers completed the same basic survey. An addendum requesting additional information regarding licensing, teaching responsibility, and experience was completed by the teachers. The narrative summary will address response differences by staff assignment and state regions as observed in the analysis of survey results.

GRADUATION REQUIREMENTS

Teachers and administrators were asked "Has your school district increased graduation requirements over the past five years"? A total of 179 teachers and administrators answered this survey item. A majority of respondents (96.6%) indicated that there had been an increase while three fourths of those who responded verified that increased requirements reflected only the changes recommended from the State Department of Education. A smaller percent of Northern Nevada educators (67.3%) than Clark County respondents (78.2%) stated that graduation requirements reflected only State Department of Education recommendations. Only two schools, Washoe High and the Occupational Center, reported that increased graduation requirements were the result of school or district recommendations rather than those of the State Department of Education. The single designated increase other than State Department's recommendations was World History requirements.

Approximately 55.8% of the teachers and administrators indicated that school boards and district personnel had expressed concern over decreases in student occupational course enrollment due to increased requirements. Both Northern and Southern Nevada respondents reported this concern.

DECISIONS ABOUT VOCATIONAL OFFERINGS

Authority Determining Occupational course offerings. Teachers and administrators were asked "Who had the authority in making decisions about occupational course offerings?" Respondents checked from a given list ALL those who were perceived to have authority. School boards and principals at the district level were most often perceived to have the authority. The superintendents and vocational directors were indicated as third and fourth most influential. Teachers and others were seen as having little authority. The fact that a larger number of teachers completed this survey item, does indicate that faculty see themselves as having little authority in determining course offerings. Listed below are the number of respondents that selected each authority figure:

Authority	Number
Principal	125
School Board	124
Superintendent	86
Vocational Director	66
Teacher	43
Other	18

Factors Determining Course or Program Offerings. Teachers and administrators rank ordered factors that were the most influential in determining course or program offerings. Choices were ranked using a one through six scale with number one rated the most important. The choices were:

1. attitudes of administrators toward vocational education,
2. academic graduation requirements,
3. available funds,
4. flexibility in staffing the vocational course or program,
5. student interest, and
6. availability of teachers.

A total of 148 teachers and administrators completed the rankings. The three factors considered the most important by teachers were "attitudes of administrators toward vocational education", "graduation requirements", and "funding". Two factors--administrators' attitudes and graduation requirements--received number one rankings by 38.2% and 27.5% of the teachers, respectively. Funding received a third place ranking by 26.1% of the teachers.

Administrators assigned top priority to "graduation requirements" (46.4%) and second ranking to "funding" (37.0%). Third place ranking for administrators was not conclusive from the survey results due to equivalent ratings assigned to the student interest factor. Administrators rated "student" interest as the first (25.9%), second (22.2%), and third (25.9%) factor for determining vocational offerings, while 21.2% of the teachers indicated "student interest" as the fourth consideration.

Teachers' responses indicated that "flexible staffing" and "availability of staff" as least considered factors in determining occupational course and program offerings. Administrators perceived their "attitudes toward vocational education" and "availability and flexibility of staffing" as having little influence in determining course or program offerings. See Tables 19 and 20 for summary of all teachers and administrators rankings.

SCHOOL PRACTICES TO ENCOURAGE STUDENT ACCESSIBILITY TO VOCATIONAL COURSES

A review of the literature indicates that across the nation, school districts are utilizing alternative methods for encouraging student enrollment and increasing student accessibility to vocational courses. School personnel were asked to identify each national trend which was utilized by their individual schools. Four trends were reported more frequently than others.

TABLE 19

FACTORS DETERMINING COURSE/PROGRAM OFFERINGS
ADMINISTRATOR RANKINGS

1=most important 6=least important

Factor	1	2	3	4	5	6	Totals
Administrators' attitudes toward voc. education	14.3% 4	17.9% 5	3.6% 1	10.7% 3	10.7% 3	42.9% 12	28
Academic graduation requirements	46.4% 13	7.1% 2	14.3% 4	17.9% 5	7.1% 2	7.1% 2	28
Available funds	7.4% 2	37.0% 10	18.5% 5	14.8% 4	14.8% 4	7.4% 2	27
Flexibility in staffing	11.1% 3	0.0% 0	22.2% 6	14.8% 4	37.0% 10	14.8% 4	27
Student interest	25.9% 7	22.2% 6	25.9% 7	7.4% 2	11.1% 3	7.4% 2	27
Availability of teachers	0.0% 0	14.8% 4	14.8% 4	33.3% 9	18.5% 5	18.5% 5	27

TABLE 20

FACTORS DETERMINING COURSE/PROGRAM OFFERINGS
TEACHER RANKINGS

	1=most important					6=least important	
Factor	1	2	3	4	5	6	Totals
Administrators' attitudes toward voc. education	38.2% 47	30.9% 38	13.0% 16	8.1% 10	0.8% 1	8.0% 11	123
Academic graduation requirements	27.5% 33	22.5% 27	20.0% 24	5.8% 7	15.0% 18	9.2% 11	120
Available funds	18.5% 22	19.9% 23	26.1% 31	16.0% 19	6.7% 8	13.4% 16	119
Flexibility in staffing	1.7% 2	8.4% 10	15.1% 18	26.1% 31	33.6% 40	15.1% 18	119
Student interest	12.7% 15	11.9% 14	17.8% 21	21.2% 25	19.5% 23	16.9% 20	118
Availability of teachers	0.8% 1	7.5% 9	10.0% 12	21.7% 26	21.7% 26	38.3% 46	120

Those trends listed in order were as follows:

TREND UTILIZED	RESPONDENTS REPORTING
Using vocational courses for a portion of science, math, or English requirement	65.0%
Summer course offerings	37.2%
Changing time allotment for course offering (i.e., semester courses vs. year courses; 1 hour vs. 3 hours)	24.0%
Offering classes outside the regular school hours	21.3%

Each of the remaining trends, reported by less than 20% of the respondents, were as follows:

Increasing the number of periods per school day	15.8%
Student incentives	15.0%
Competency testing	13.1%
Flexible scheduling	12.6%
Testing out of required courses	11.5%

It should be noted that the distinction of whether summer courses were vocational or academic was not determined by the survey. Respondents did not always represent personnel from each of the three school districts. Table 21 summarizes the number of individual schools utilizing each trend.

OCCUPATIONAL ENROLLMENT FACTORS

Positive and Negative Factors affecting Vocational Enrollments. Teachers and administrators were given a list of factors that affect occupational enrollments. Respondents were asked to rate those factors as having a positive or negative influence and then to determine the degree of influence each factor had on occupational enrollments.

More factors were rated as a having positive rather than negative influence on occupational enrollments. The ten factors in rank order perceived as having more positive than negative influence on occupational enrollments were:

FACTOR	RESPONDENTS
Teachers' occupational and teaching skills	86.9%
Student interest	86.3%
Occupational education course offering reflect job market	71.6%
Community involvement	68.9%
Parental support	67.2%
Federal funding	66.1%
State funding	65.6%

TABLE 21

UTILIZATION OF TRENDS IN SCHOOLS
AS REPORTED BY ADMINISTRATORS AND TEACHERS
N=(142)

NATIONAL TREND	SCHOOLS UTILIZING		SCHOOLS NOT UTILIZING	
	NORTHERN NEVADA	SOUTHERN NEVADA	NORTHERN NEVADA	SOUTHERN NEVADA
Vocational courses used for academic credit	9	14	0	0
Competency testing	4	8	5	6
Summer Course Offerings	8	12	12	12
Offering classes after school hours	5	11	4	3
Testing out of required classes	6	6	3	8
Increasing periods in school days	5	9	4	5
Changing time allotments for course offerings	9	9	0	5
Flexible scheduling	6	8	3	6
Student incentives	5	9	3	5
Others	1	2	8	12

Availability of teachers	63.4%
Course/career advisement	56.3%
Local funding	55.2%

The two factors perceived by fewer number of administrators and teachers to have a positive influence on occupational enrollments were:

Attitudes towards vocational education	48.1%
Graduation requirements	22.4%

Administrator and Teachers' Perceptions of Positive and Negative Factors. A comparison of administrator and teacher responses shows similar ratings for most factors. Three discrepancies in perceptions--the teachers' occupational and teaching skills, occupational courses reflecting job market, and availability of teachers--occurred when a greater percent of teachers than administrators viewed these items as having a positive effect on occupational enrollments. However, more administrators (72.7%) than teachers (54.1%) perceived advisement as having a positive effect on enrollments. Table 22 summarizes the percentage of administrators and teachers who viewed each factor as having positive effects on enrollments.

Influence of Each Factor on Vocational Enrollments. Each negative and positive factor was rated for the degree of influence using the following scale: 1) no influence; 2) slight influence; 3) moderate influence; 4) considerable influence; and, 5) great influence. Perceptions regarding the degree of influence each designated positive and negative factor had on occupational enrollments are summarized in Table 23 and 24.

A comparison of ratings indicated differences in the amount of perceivable influence. Factors viewed as having a greater positive than negative influence on student enrollments were as follows: student interest, federal funding, teacher's occupational and teaching skills, occupational course offerings reflecting job market, parental support, community involvement, and availability of teachers. Factors indicated to have a greater negative than positive influence on student enrollments were as follows: local and state funding, course/career advisement, and graduation requirements. Attitudes toward vocational education were perceived to have approximately equal negative (61.4%) and positive (61.3%) influence.

Regional Perceptions of Occupational Enrollment Factors. A comparison of ratings by school district respondents indicated one major difference. Carson City respondents (45.5%) indicated "student interest" was not a major factor

TABLE 22

POSITIVE FACTORS FOR VOCATIONAL ENROLLMENTS

Factors	Administrators N=29	Teachers N=154
Student Interest	87.5%	83.9%
Graduation Requirements	19.4%	22.4%
Local Funding	54.8%	54.9%
State Funding	70.5%	63.6%
Federal Funding	67.7%	65.4%
Teacher's Occupational & Teaching Skills	75.8%	87.6%
Attitudes towards Vocational Education	46.9%	46.5%
Occupational Education Course Offering Reflects Job Market	64.7%	74.1%
Parental Support	66.7%	66.0%
Community Involvement	69.0%	71.0%
Course/Career Advisement	72.7%	54.1%
Availability of Teachers	53.1%	72.8%

TABLE 23

CLARK COUNTY SCHOOL DISTRICT'S RATINGS
OF OCCUPATIONAL ENROLLMENT FACTORS
N=(108)

FACTOR	NO INFLUENCE	SLIGHT INFLUENCE	MODERATE INFLUENCE	CONSIDERABLE INFLUENCE	GREAT INFLUENCE
Student Interest	4.2%	7.4%	21.1%	29.5%	37.9%
Graduation Requirements	7.1%	7.1%	35.7%	21.4%	28.6%
Local Funding	8.8%	17.5%	31.4%	28.1%	14.0%
State Funding	6.9%	11.1%	40.3%	26.4%	15.3%
Federal Funding	6.8%	11.0%	28.8%	28.8%	24.7%
Teacher Oc. Ed. & Teaching Skills	5.4%	8.6%	23.7%	31.2%	31.2%
Attitudes toward Voc. Ed.	1.8%	1.8%	30.9%	38.2%	27.3%
Oc. Ed. Courses reflect Job Market	3.8%	6.4%	34.6%	37.2%	17.9%
Parental Support	2.7%	9.3%	29.3%	33.5%	25.3%
Community Involvement	5.0%	15.0%	37.5%	23.9%	18.6%
Course/Career Advisement	4.6%	10.8%	36.9%	36.9%	10.8%
Availability of Teachers	7.2%	13.0%	33.3%	26.1%	20.3%

TABLE 24

DEGREE OF NEGATIVE INFLUENCE
AS REPORTED BY ADMINISTRATORS AND TEACHERS

FACTOR	NO INFLUENCE	SLIGHT INFLUENCE	MODERATE INFLUENCE	CONSIDERABLE INFLUENCE	GREAT INFLUENCE	TOTAL
Student Interest	27.6% (8)	20.7% (6)	20.7% (6)	10.3% (3)	20.7% (6)	29
Graduation Requirements	4.1% (6)	6.8% (10)	9.6% (14)	21.2% (31)	58.2% (85)	146
Local Funding	16.5% (14)	10.6% (9)	30.6% (26)	22.4% (19)	20.0% (17)	85
State Funding	16.9% (11)	15.4% (10)	21.5% (14)	20.0% (13)	26.2% (17)	65
Federal Funding	18.8% (12)	15.6% (10)	21.9% (14)	15.6% (10)	28.1% (18)	64
Teacher's Occupational & Teaching Skills	14.8% (4)	18.5% (5)	37.0% (10)	14.8% (4)	14.8% (4)	27
Attitudes towards Vocational Education	1.0% (1)	9.9% (10)	27.7% (28)	24.8% (25)	36.6% (37)	101
Occupational Education Course Offerings Reflect Job Market	14.0% (7)	18.0% (9)	36.0% (18)	18.0% (9)	14.0% (7)	50
Parental Support	15.9% (10)	17.5% (11)	28.6% (18)	22.2% (14)	15.9% (10)	63
Community Involvement	17.0% (9)	20.8% (11)	35.8% (19)	20.8% (11)	5.7% (3)	53
Course/Career Advisement	18.4% (14)	11.8% (9)	17.1% (13)	23.7% (18)	28.9% (22)	76
Availability of Teachers	19.2% (10)	23.1% (12)	23.1% (12)	21.2% (11)	13.5% (7)	52

affecting enrollments. Fewer Washoe County (14.3%) and Clark County (11.6%) respondents reported this same influence.

TRENDS IN OCCUPATIONAL EDUCATION

Occupational trends occurring in each school district were identified from the study. Educators were asked to designate the frequency specific trends occurred in their school district using a scale where 1=never, 2=rarely, 3=sometimes, 4=often, and 5=always. The five items receiving the highest average frequency ratings were recruitment efforts (3.37), teaching for entry level positions (3.66), equal access and recruitment of males and females to occupational courses (3.98), availability of coop work experience (3.24) and teachers' opportunity to upgrade occupational and teaching skills (3.04). Mean ratings suggest that these trends occur at a frequency of sometimes or often while other trends were occurring less often. See Table 25 for average frequency rates for all trends.

Trends in Occupational Education by Region.

Trends utilized in each school district are reported in Tables 26, 27, and 28. A review of each reported frequency level discloses that many trends were perceived to occur "sometimes" in each school district. Washoe County reported a frequency of "sometimes" for each of the following trends:

1) articulation between business, labor, and industry
2) articulation between high school and post secondary institutions
3) recruitment efforts
4) availability of coop work experience or field based learning
5) immersion of career concepts into general and academic course offerings
6) counselors' use of group techniques and computer assisted guidance.

Carson City reported frequency of "sometimes" for all trends except four. Two of those trends--recruitment efforts and occupational courses teach for entry level positions--were perceived to occur "often". The other two trends--articulation between business, labor, and industry and alternative placement through competency assessment--were opined to occur less frequently.

Clark County responded with "sometimes" frequencies for all trends except four. Recruitment efforts, teaching for entry level positions, and equal access to vocational courses by males and females were believed to occur more often. Counselors' group techniques and computer assisted guidance were per-

TABLE 25

FREQUENCY RATES OF TRENDS
AS REPORTED BY TEACHERS AND ADMINISTRATORS

TREND	NEVER (1)	RARELY (2)	SOMETIMES (3)	OFTEN (4)	ALWAYS (5)	MEAN SCORES	Total
Articulation between business, labor and industry	10.1% 17	24.4% 41	40.5% 68	21.4% 36	3.6% 6	2.84	168
Articulation efforts between high school and post secondary institutions	12.7% 21	30.9% 51	40.0% 66	12.7% 21	3.6% 6	2.64	165
Articulation between occupational educators and counselors	4.7% 8	29.4% 50	39.4% 67	21.8% 37	4.7% 8	2.92	170
Recruitment efforts	4.2% 7	18.5% 31	29.8% 50	31.5% 53	16.1% 27	3.37	168
Availability of coop work experience or field based learning	6.6% 11	15.6% 26	37.7% 63	27.5% 46	12.6% 21	3.24	167
Career concepts immersed in general and academic course offerings	8.0% 13	29.4% 48	37.4% 61	17.2% 28	8.0% 13	2.88	163
Counselors group techniques and computer assisted guidance	18.5% 29	26.8% 42	39.5% 62	12.1% 19	3.2% 5	2.55	157
Exploratory occupational programs	15.5% 25	32.9% 53	34.2% 55	15.5% 25	1.9% 3	2.55	161
Occupational education for entry level positions	1.8% 3	13.3% 22	25.9% 43	35.5% 59	23.5% 39	3.66	166
Teacher opportunity to update occupational and teaching skills	9.0% 15	22.8% 38	34.1% 57	24.0% 40	10.2% 17	3.04	167
Equal access for males and females	3.1% 5	8.6% 14	19.8% 32	24.1% 39	44.4% 72	3.98	162
Alternative placement through competency assessment	25.6% 40	24.4% 38	37.2% 58	8.3% 13	4.5% 7	2.42	156

50

TABLE 26

FREQUENCY RATES OF TRENDS
WASHOE COUNTY RESPONDENTS

Trend	Never	Rarely	Sometimes	Often	Always	Total
Articulation between business, labor and industry	17.9% 10	26.8% 15	41.1% 23	14.3% 8	0.0% 0	56
Articulation between high school and post secondary institutions	16.1% 9	28.6% 16	39.3% 22	14.3% 8	1.8% 1	56
Articulation between occupational educators and counselors	6.9% 4	39.7% 23	36.2% 21	13.8% 8	3.4% 2	58
Recruitment efforts	1.8% 1	22.8% 13	33.3% 19	24.6% 14	17.5% 10	57
Availability of coop work experience or field based learning	14.5% 8	32.7% 18	41.8% 23	10.9% 6	0.0% 0	55
Career concepts immersed in general and academic course offerings	15.1% 8	32.1% 17	35.8% 19	15.1% 8	1.9% 1	53
Counselors group techniques and computer assisted guidance	17.3% 9	17.3% 9	48.1% 25	15.4% 8	1.9% 1	52
Exploratory occupational programs	27.3% 15	30.9% 17	29.1% 16	12.7% 7	0.0% 0	55
Occupational education for entry level positions	1.9% 1	13.0% 7	24.1% 13	37.0% 20	24.1% 13	54
Teacher opportunity to update occupational and teaching skills	3.6% 2	33.9% 19	28.6% 16	30.4% 17	3.6% 2	56
Equal access for males and females	3.8% 2	13.5% 7	17.3% 9	25.0% 13	40.4% 21	52
Alternative placement through competency assessment	37.7% 20	24.5% 13	28.3% 15	5.7% 3	3.8% 2	53

TABLE 27

FREQUENCY RATES OF TRENDS
CLARK COUNTY RESPONDENTS

Trend	Never	Rarely	Sometimes	Often	Always	Total
Articulation between business, labor and industry	4.1% 4	19.6% 19	44.3% 43	26.8% 26	5.2% 5	97
Articulation between high school and post secondary institutions	8.5% 8	35.1% 33	41.5% 39	11.7% 11	3.2% 3	94
Articulation between occupational educators and counselors	4.1% 4	24.7% 24	40.2% 39	26.8% 26	4.1% 4	97
Recruitment efforts	5.2% 5	16.7% 16	27.1% 26	35.4% 34	15.6% 15	96
Availability of coop work experience or field based learning	2.1% 2	7.3% 7	37.5% 36	32.3% 31	20.8% 20	96
Career concepts immersed in general and academic course offerings	5.3% 5	27.4% 26	36.8% 35	18.9% 18	11.6% 11	95
Counselors group techniques and computer assisted guidance	18.7% 17	35.2% 32	34.1% 31	9.9% 9	2.2% 2	91
Exploratory occupational programs	8.7% 8	34.8% 32	34.8% 32	19.6% 18	2.2% 2	92
Occupational education for entry level positions	0.0% 0	13.4% 13	25.8% 25	37.1% 36	23.7% 23	97
Teacher opportunity to update occupational and teaching skills	9.4% 9	17.7% 17	38.5% 37	18.8% 18	15.6% 15	96
Equal access for males and females	3.1% 3	7.3% 7	17.7% 17	24.0% 23	47.9% 46	96
Alternative placement through competency assessment	18.0% 16	23.6% 21	43.8% 39	10.1% 9	4.5% 4	89

TABLE 28

FREQUENCY RATES OF TRENDS
CARSON CITY RESPONDENTS

Trend	Never	Rarely	Sometimes	Often	Always	Total
Articulation between business, labor and industry	18.2% 2	54.5% 6	18.2% 2	9.1% 1	0.0% 0	11
Articulation between high school and post secondary institutions	27.3% 3	18.2% 2	36.4% 4	9.1% 1	9.1% 1	11
Articulation between occupational educators and counselors	0.0% 0	18.2% 2	54.5% 6	18.2% 2	9.1% 1	11
Recruitment efforts	9.1% 1	18.2% 2	36.4% 4	27.3% 3	9.1% 1	11
Availability of coop work experience or field based learning	0.0% 1	9.1% 1	27.3% 3	63.6% 7	0.0% 0	11
Career concepts immersed in general and academic course offerings	0.0% 1	18.2% 2	63.6% 7	9.1% 1	9.1% 1	11
Counselors group techniques and computer assisted guidance	18.2% 2	9.1% 1	36.4% 4	18.2% 2	18.2% 2	11
Exploratory occupational programs	9.1% 1	27.3% 3	54.5% 6	0.0% 0	9.1% 1	11
Occupational education for entry level positions	9.1% 1	9.1% 1	36.4% 4	27.3% 3	18.2% 2	11
Teacher opportunity to update occupational and teaching skills	27.3% 3	0.0% 0	36.4% 4	36.4% 4	0.0% 0	11
Equal access for males and females	0.0% 0	0.0% 0	40.0% 4	30.0% 3	30.0% 3	10
Alternative placement through competency assessment	27.3% 3	27.3% 3	27.3% 3	9.1% 1	9.1% 1	11

A comparison of frequency rating at each end of the scale (never/rarely and often/always) revealed similarities as well as differences in school district responses. All three school districts reported "often and always" frequency rates for the following trends:

1) equal access for males and females to vocational classes

2) occupational coursework teaches for entry-level positions.

Differences in "often/always" frequency ratings reported by each school district included:

1) Clark County (51.0%) reported "often/always" frequencies for recruitment efforts with Washoe County (42.1%) and Carson City (36.4%) indicating this frequency.

2) Carson City (63.6%) and Clark County (53.1%) reported "often/always" frequency rates for availability of coop work experience or field based learning while Washoe County (10.9%) reported this frequency.

Those trends viewed to occur "never/rarely" more often than other rates by all three school districts were

1) articulation efforts between high school and post-secondary institutions

2) alternative placement through competency testing.

Trends reported to occur at different frequencies within each school district included:

1) Frequency rates of never/rarely for exploratory occupational programs offerings was reported more often by Washoe County (58.2%) and Clark County (43.5%).

2) Clark County (53.9%) reported the lowest frequency rates for counselors' use of group techniques and computer assisted guidance. Fewer Carson City (27.3%) and Washoe County (34.6%) respondents indicated this occurred at the frequency of never/rarely.

3) Carson City (72.7%) and Washoe County (44.6%) indicated "never/rarely rates for articulation with business, labor and industry. Clark County perceived this trend to occur "sometimes"

4) Washoe County (47.2%) reported the never/rarely frequencies for career concepts immersed in general and academic course offering. These rates were reported by fewer Carson City (18.2%) and Clark County (32.7%) respondents.

5) Washoe County indicated the lowest frequency for teachers' opportunity to update occupational and teaching skills. Clark County (27.1%) and Carson City (27.3%) indicated a never/rarely frequency for this trend.

Administrator and Teachers' Perceptions of Occupational Trends. When considering the total percentages of those who selected ratings at each end of the continuum (i.e., never/rarely and often/always), teachers and administrators had different frequency ratings. Differences exceeding 9-10% were noted for some trends as shown in Tables 29 and 30.

Administrators indicated more often than teachers that the following trends were utilized:

1) articulation between business, labor, and industry;
2) articulation between occupational educators and counselors;
3) recruitment efforts by occupational teachers;
4) availability of cooperative work experience or field based learning;
5) counselor's use of group techniques and computer assisted guidance; and
6) males and females have equal access to and are recruited for occupational course offerings.

Those trends viewed by teachers as occurring more often than administrators' responses by at least 10% were:

1) career concepts immersed in general and academic course offerings;
2) occupational courses teach entry level positions.

Teachers more often than administrators indicated a never/rarely frequency rate for the following trends:

1) articulation between occupational educators and counselors;
2) counselors' use of group techniques and computer assisted guidance for career education;
3) exploratory occupational programs offered to assist students in career decisions;
4) teachers have an opportunity to update their occupational and teaching skills;
5) males and females have equal access and recruitment for occupational course offerings; and
6) alternative placement in course curriculum through competency testing.

A comparison of teacher and administrators answers regarding frequencies indicated a statistical significant difference by .05 in the following trends:

TABLE 29

FREQUENCY RATES OF TRENDS
ADMINISTRATOR RESPONSES

TREND	NEVER	RARELY	SOMETIMES	OFTEN	ALWAYS	TOTAL
Articulation between business, labor and industry	3.4% 1	24.1% 7	37.9% 11	31.0% 9	3.4% 1	29
Articulation efforts between high school and post secondary institutions	3.4% 1	34.5% 10	41.4% 12	17.2% 5	3.4% 1	29
Articulation between occupational educators and counselors	3.4% 1	10.3% 3	51.7% 15	31.0% 9	3.4% 1	29
Recruitment efforts	3.4% 1	20.7% 6	20.7% 6	41.4% 12	13.8% 4	29
Availability of coop work experience or field based learning	3.4% 1	13.8% 4	34.5% 10	44.8% 13	3.4% 1	29
Career concepts immersed in general and academic course offerings	3.6% 1	32.1% 9	53.6% 15	7.1% 2	3.6% 1	28
Counselors group techniques and computer assisted guidance	10.3% 3	3.4% 1	55.2% 16	27.6% 8	3.4% 1	29
Exploratory occupational programs	0.0% 0	31.0% 9	48.3% 14	20.7% 6	0.0% 0	29
Occupational education for entry level positions	0.0% 0	17.9% 5	42.9% 12	35.7% 10	3.6% 1	28
Teacher opportunity to update occupational and teaching skills	3.6% 1	17.9% 5	50.0% 14	28.6% 8	0.0% 0	28
Equal access for males and females	0.0% 0	0.0% 0	14.3% 4	28.6% 8	57.1% 16	28
Alternative placement through competency assessment	10.3% 3	13.8% 4	62.1% 18	13.8% 4	0.0% 0	29

TABLE 30

FREQUENCY RATES OF TRENDS
TEACHER RESPONDENTS

TREND	NEVER	RARELY	SOMETIMES	OFTEN	ALWAYS	TOTAL
Articulation between business, labor and industry	11.5% 16	24.5% 34	41.0% 57	19.4% 27	3.6% 5	139
Articulation efforts between high school and post secondary institutions	14.7% 20	30.1% 41	39.7% 54	11.8% 16	3.7% 5	136
Articulation between occupational educators and counselors	5.0% 7	33.3% 47	36.9% 52	19.9% 28	5.0% 7	141
Recruitment efforts	4.3% 6	18.0% 25	31.7% 44	29.5% 41	16.5% 23	139
Availability of coop work experience or field based learning	7.2% 10	15.9% 22	38.4% 53	23.9% 33	14.5% 20	138
Career concepts immersed in general and academic course offerings	8.9% 12	28.9% 39	34.1% 46	19.3% 26	8.9% 12	135
Counselors group techniques and computer assisted guidance	20.3% 26	32.0% 41	35.9% 46	8.6% 11	3.1% 4	128
Exploratory occupational programs	18.9% 25	33.3% 44	31.1% 41	14.4% 19	2.3% 3	132
Occupational education for entry level positions	2.2% 3	12.3% 17	22.5% 31	35.5% 49	27.5% 38	138
Teacher opportunity to update occupational and teaching skills	10.1% 14	23.7% 33	30.9% 43	23.0% 32	12.2% 17	139
Equal access for males and females	3.7% 5	10.4% 14	20.9% 28	23.1% 31	41.8% 56	134
Alternative placement through competency assessment	29.1% 37	26.8% 34	31.5% 40	7.1% 9	5.5% 7	127

1) counselors' use of group techniques and computer assisted guidance;

2) occupational courses prepare students for entry level positions; and

3) alternative placement in course curriculum through competency testing.

Importance Rating of Each Trend. Respondents were also asked to indicate the importance of each item to the success of an occupational program. All trends received ratings indicating that each was perceived by the majority of respondents to be very important or somewhat important. See Table 31 for ratings.

School district responses indicate that a majority or more than half of the respondents from all school district felt the following trends to be "very important":

1) Articulation between occupational educators and counselors;

2) Teachers have available opportunities to update occupational and teaching skills;

3) Recruitment efforts by occupational education teachers;

4) Occupational courses teach entry-level positions;

5) Males and females have equal access to and are recruited for occupational course offerings; and

6) Articulation between business, labor, and industry to determine curriculum objectives and program goals.

"Somewhat" or "very important" ratings for five trends were selected by an approximately equal number of respondents. Four of the five trends directly related to student instruction or career awareness were immersion of career concepts in general and academic course offerings; counselor group techniques and computer-assisted guidance; exploratory occupational programs; and, alternate placement through competency testing. The fifth trend receiving approximately the same number of "somewhat important" or "very important" rankings was articulation efforts between high school and post-secondary institutions.

OCCUPATIONAL EDUCATION PHILOSOPHY

Teachers and administrators indicated their philosophy of vocational education by responding to sixteen statements using a Likert scale where 1=strong-

TABLE 31

IMPORTANCE RATING OF TRENDS

FACTOR	NOT IMPORTANT	SOMEWHAT IMPORTANT	VERY IMPORTANT	TOTAL
Articulation between business, labor and industry	5.5% 9	30.9% 51	63.6% 105	165
Articulation between high school and post secondary institutions	9.8% 16	42.9% 70	47.2% 77	163
Articulation between occupational educators and counselors	3.6% 6	19.8% 33	76.6% 128	167
Recruitment efforts	6.1% 1	24.2% 40	69.7% 115	165
Availability of coop work experience or field based learning	9.1% 15	30.9% 51	60.0% 99	165
Career concepts immersed in general and academic course offerings	4.3% 7	50.9% 82	44.7% 72	161
Counselors group techniques and computer assisted guidance	13.5% 21	47.7% 74	38.7%	155 60
Exploratory occupational programs	8.8% 14	48.8% 78	42.5%	160 68
Occupational education for entry level positions	6.1% 10	27.6% 45	66.3% 108	163
Teacher opportunity to update occupational and teaching skills	3.6% 6	20.6% 34	75.8% 125	165
Equal access for males and females	6.3% 10	28.3% 45	65.4% 104	159
Alternative placement through competency assessment	9.2% 14	51.6% 79	39.2% 60	153

ly disagree, 2=disagree, 3=undecided, 4=agree and 5=strongly agree. A majority of respondents indicated "agreement" or "strong agreement" with all statements except one. Respondents as a group revealed strong disagreement or disagreement on the statement that all students receive counseling and guidance in career choices. See Table 32 for a summary of ratings.

Differences Between Teachers' and Administrators' Philosophy of Vocational Education. Teachers' average ratings when compared to administrators indicated uniform ratings on the following statements: (See Tables 33 and 34)

1) School curriculum should give students an opportunity to integrate skills and knowledge across academic and occupational courses;

2) Increased graduation requirements has decreased occupational enrollments;

3) All students in our school district are provided counseling and guidance in career choices, labor supply and demand information, and promotion opportunities; and

4) Cooperative occupational education should be an integral part of every occupational program.

The largest difference in ratings were attitudes about extended contracts. Although only 30% of the administrators favored this item, 70% of the teachers favored extended contracts. Other differences were the variations in the number of respondents indicating agreement and strong agreement with the statements.

A larger percentage of teachers than administrators indicated agreement and stronger agreement with all statements except four. Those statements rated higher by administrators were:

1) School curriculum should give students an opportunity to integrate skills and knowledge across academic and occupational courses;

2) Vocational organizations are beneficial to the total education of students;

3) All students in your school district are provided counseling and guidance in career choices, labor supply and demand information, and promotion opportunities; and

4) Community resources allow students' on the job experience to be directly related to in-school occupational education program.

Regional Differences in Vocational Education Philosophy. A comparison of school district responses indicated some differences in the type of rating as

TABLE 32

OCCUPATIONAL EDUCATION PHILOSOPHY
ALL RESPONDENTS (N=178)

PHILOSOPHY STATEMENT	STRONGLY DISAGREE	DISAGREE	UNDECIDED	AGREE	STRONGLY AGREE
Oc. Ed. should develop communication and computational skills	0	2.2%	5.1%	50.0%	42.7%
Oc. Ed. courses will improve academic skills	1.1%	2.3%	15.3%	48.0%	33.3%
Skills and knowledge should be integrated	0	0	2.8%	38.5%	58.7%
Selected Oc. Ed. courses should satisfy graduation requirements	2.8%	1.7%	3.9%	17.3%	74.3%
Achievement standards for Oc. Ed. classes are high	1.7%	13.4%	20.1%	41.9%	22.9%
Increased grad. requirements has decreased Oc. Ed. enrollments	3.4%	3.4%	15.6%	14.5%	63.1%
All teachers should be inserviced about Oc. Ed.	4.5%	9.5%	13.4%	32.4%	40.2%
Students get more encouragement to pursue college prep courses than Oc. Ed. classes	2.8%	2.8%	3.4%	24.6%	66.5%
Voc. organizations are beneficial to the students' educ.	2.2%	3.9%	24.2%	34.3%	35.4%
Oc. Ed. can provides voc. prep. for students who will work in many fields	0	1.1%	7.3%	48.3%	43.4%
All students receive counseling and guidance for career education	31.0%	28.7%	25.3%	12.6%	2.3%
Grad. requirements should be double tracked to accommodate college and voc. bound students	4.0%	7.3%	14.1%	24.9%	49.7%
Vocational teachers should have extended contracts	4.5%	8.5%	23.2%	33.9%	29.9%
Community resources provide work experience directly related to in-school Oc. Ed. program	4.6%	12.1%	21.3%	43.7%	18.4%
Tracking students into Oc. Ed. programs would decrease drop-out rate	2.3%	7.9%	21.5%	34.5%	33.9%
Coop. work experience should be an integral part of every Oc. Ed. program	1.1%	6.2%	13.6%	36.2%	42.9%

TABLE 33

OCCUPATIONAL EDUCATION PHILOSOPHY
TEACHER RESPONSES (N=150)

PHILOSOPHY STATEMENT	STRONGLY DISAGREE	DISAGREE	UNDECIDED	AGREE	STRONGLY AGREE
Oc. Ed. should develop of communication and computational skills	0.0%	0.7%	5.4%	48.3%	45.6%
Oc. Ed. courses will improve academic skills	0.7%	0.7%	13.5%	48.6%	36.5%
Skills and knowledge should be integrated across academic and Oc. Ed. courses	0.0%	0.0%	3.3%	36.0%	60.7%
Selected Oc. Ed. courses should satisfy graduation requirements	2.7%	0.7%	2.7%	13.3%	80.7%
Achievement standards for Oc. Ed. classes are high	2.0%	9.3%	19.3%	43.3%	26.0%
Increased grad. requirements has decreased Oc. Ed. enrollments	3.3%	2.7%	15.3%	13.3%	65.3%
All teachers should be inserviced about Oc. Ed.	4.7%	5.3%	11.3%	33.3%	45.3%
Encouragement to pursue college prep. courses is greater than Oc. Ed. classes	3.3%	2.0%	2.7%	20.0%	72.0%
Voc. organizations are beneficial to the students' education	2.0%	3.4%	27.5%	29.5%	37.6%
Oc. Ed. provides voc. prep. for students who will work in many fields	0.0%	0.7%	7.4%	43.0%	49.0%
All students receive counseling and guidance for career educ.	34.2%	26.7%	25.3%	11.6%	2.1%
Grad. requirements should be double tracked to accommodate college and voc. bound students	3.4%	5.4%	13.5%	23.0%	54.7%
Vocational teachers should have extended contracts	2.7%	6.1%	20.9%	35.1%	35.1%
Community resources provide work experience directly related to in-school Oc. Ed. program	5.5%	11.7%	21.4%	40.0%	21.4%
Tracking students into Oc. Ed. programs would decrease drop-out rate	0.7%	7.4%	22.3%	32.4%	37.2%
Coop. work experience should be an integral part of every Oc. Ed. program	1.4%	5.4%	14.2%	33.1%	45.9%

TABLE 34

OCCUPATIONAL EDUCATION PHILOSOPHY
ADMINISTRATOR RESPONSES (N=29)

PHILOSOPHY STATEMENT	STRONGLY DISAGREE	DISAGREE	UNDECIDED	AGREE	STRONGLY AGREE
Oc. Ed. should develop communication and computational skills	0.0%	10.3%	3.4%	58.6%	27.6%
Oc. Ed. courses will improve academic skills	3.4%	10.3%	24.1%	44.8%	17.2%
Skills and knowledge should be integrated across academic and Oc. Ed. courses	0.0%	0.0%	0.0%	51.7%	48.3%
Selected Oc. Ed. courses should satisfy graduation requirements	3.4%	6.9%	10.3%	37.9%	41.4%
Student achievement standards for Oc. Ed. classes are high	0.0%	34.5%	24.1%	34.5%	6.9%
Increased grad. requirements has decreased Oc. Ed. enrollments	3.4%	6.9%	17.2%	20.7%	51.7%
All teachers should be inserviced about Oc. Ed.	3.4%	31.0%	24.1%	27.6%	13.8%
Encouragement to pursue college prep. courses is greater than Oc. Ed. classes	0.0%	6.9%	6.9%	48.3%	37.9%
Voc. organizations are beneficial to the students' education	3.4%	6.9%	6.9%	58.6%	24.1%
Oc. Ed. provides voc. prep. for students who will work in many fields	0.0%	3.4%	6.9%	75.9%	13.8%
All students receive counseling and guidance for career educ.	14.3%	39.3%	25%	17.9%	3.6%
Grad. requirements should be double tracked to accommodate college and voc. bound students	6.9%	17.2%	17.2%	34.5%	24.1%
Vocational teachers should have extended contracts	13.8%	20.7%	34.5%	27.6%	3.4%
Community resources provide work experience directly related to in-school Oc. Ed. program	0.0%	13.8%	20.7%	62.1%	3.4%
Tracking students into Oc. Ed. programs would decrease drop-out rate	10.3%	10.3%	17.2%	44.8%	17.2%
Coop. work experience should be an integral part of every Oc. Ed. program	0.0%	10.3%	10.3%	51.7%	27.6%

well as quantity of responses favoring each rating for eleven statements. Those differences were as follows:

1) More Washoe County respondents (49.1%) than Carson City (36.4%) and Clark County (39.0%) strongly agreed that occupational education should be concerned with the development of communication and computational skills.

2) A larger percent of Carson City respondents (63.6%) compared to Washoe County (36.2%) and Clark County (42.9%) agreed that student achievement standards for occupational education were high. On the same item, more Washoe County educators (32.8%) than Carson City (18.2%) and Clark County (19.0%) rated this "strongly agree".

3) Stronger support was shown by Carson City (81.4%) and Washoe County (74.1%) respondents than Clark County (55.2%) in their agreement that increased graduation requirements had decreased occupation enrollments.

4) Fewer Clark County respondents (58.1%) than Washoe County (79.3%) and Carson City (81.8%) strongly agreed that students get more encouragement to pursue college preparatory than occupational courses.

5) Fewer Clark County respondents (70.5%) than Washoe County (81%) and Carson City (81.8%) strongly agreed that students should be able to satisfy graduation requirements with selected courses in occupational education.

6) More Carson City respondents (81.8%) than Washoe County (69%) and Clark County (61.9%) agreed and strongly agreed that student achievement standards were high for vocational courses.

7) Fewer Carson City respondents (45.4%) than Washoe County (68.4%) and Clark County (57.9%) disagreed or strongly disagreed that all students received career information.

8) Stronger support from Carson City respondents (90.9%) than Washoe County (71.9%) and Clark County (74.3%) was indicated for double tracking of vocational and college bound students.

9) Clark County respondents (70.7%) more than Carson City (55.3%) and Washoe County (45.5%) agreed and strongly agreed that vocational teachers should have extended contracts.

10) Carson City respondents (81.8%) compared to Washoe County (45.4%) and Clark County (67.3%) agreed and strongly agreed community resources provided job experience related to occupational programs.

11) More Carson City respondents (63.6%) than Washoe County (42.9%) and Clark County (40.6%) strongly agreed that cooperative occupational education should be an integral part of every occupational program.

SUMMARY OF FINDINGS AND IMPLICATIONS FOR VOCATIONAL PROGRAMS

This section of the report summarizes the findings of the four surveys completed by parents, students, vocational teachers, and administrators. Whenever appropriate parallel or related findings from the four surveys appear, commonalities will be discussed. Some interpretations of the findings will be included particularly as they relate to possible reasons for declining occupational enrollments.

Purposes of Vocational Education. A majority of the students (87.3%) perceived occupational education to have three purposes: to explore occupational areas, to develop general skills for later use at home or on the job, and to prepare for employment in specific occupations. A slightly smaller percent of parents (72.6%) than students selected those same purposes with an additional 12.5% of the parents also supporting the choice that vocational classes were an alternative to academic classes. Some parents may philosophically view their child's education as being double-tracked for academic or vocational course work, even though present graduation requirements are not designed in this manner. Vocational education and academic courses should not be perceived as an either/or situation, but rather as a mutual supportive program of study for career preparation. A strong vocational guidance program should help students identify vocational courses that provide pre-employment or entry level skills essential for their chosen career as well as help in the selection of appropriate academic courses.

Education Level of Parents. The education level of parents appears to influence their choice of purpose for vocational education. Parents from Carson City who reported less college experience indicated more often than other parents that one of the purposes of vocational education was to prepare students for technical school. A recommendation based on the results of this study would be to have school districts evaluate the exposure that parents have with vocational education. The reported educational backgrounds of parents in this study suggests that they have little personal experience with occupational education. Program information, post graduation benefits of vocational education and labor force information must be communicated to the parents so that they understand the importance of vocational education.

Recommendation of Vocational Courses. Approximately three-fourths of the students and four-fifths of the parents surveyed recommended that students take a vocational course. Student and parents' reasons for this recommendation were

similar. Parents' first choice and students' second choice for recommending vocational courses were career exploration. Parents' second choice of perceived purpose for vocational education was that students should learn job skills. Students' first choice--to learn everyday skills and preparation for the future--were more generalized than reasons given by parents. A small number of parent and student respondents indicated vocational education was preparation for college. As indicated earlier, this is a viable argument for students to take vocational courses, but may not be currently stressed enough in occupational guidance programs. Vocational curriculum that includes skills in career planning, problem solving/decision making, data manipulation, resource management, systems of technology, economics of work, and human relations is applicable to the needs of the college bound student as well as the vocational student.

Reasons for Not Recommending Vocational Courses. Parents and students who did not recommend pursuing at least one vocational course, justified this response by stating that students should have the flexibility to choose courses. Although not intended, respondents seemed to interpret the words recommendation and requirement to be synonymous. The second most frequent reason stated by parents was that vocational education was not necessary for college bound students. Students' second reason was that it was not necessary for future plans. Other reasons for not recommending vocational courses stated by both students and parents included the concern that students did not always have an interest in vocational education and did not have time for vocational courses. The only reason given which reflected a negative attitude about vocational education was that it was not considered as important.

In support of the opposing view that vocational education is necessary for the future plans of some students, employers view lack of positive attitudes toward work, lack of general work skills, and lack of specific technical skills to be barriers to employment. An employees' inability to apply basic skills including reading, math, and communication skills to the work place are perceived as additional barriers to successful employment. Each of these barriers could be remediated or prevented through a student's participation in a strong vocational curriculum.

Opinions About Vocational Students. Opinions about vocational students were favorable. Three-fourths of the parents and students perceived vocational students to be better prepared for work and to have a better educational

background. A small percent (approximately 8%) of the parents and students felt there was no difference between vocational and nonvocational students. Less favorable opinions selected by approximately 7% of the parents and students were that vocational students would be less prepared for college and have less academic ability.

Career Choices, Guidance, and Advisement. Ideally, vocational education programs should parallel job market demands, however students' career choices do not reflect those same market demands. Career guidance in schools must include labor market statistics, job promotion, and career information. Survey results from teachers and administrators indicated that very few respondents feel that all students are getting this information. Students also indicated this clearly when 66% responded that REQUIRED classes did not teach them career information. Schools should evaluate their curriculum in search of methods to improve the career education of students. Group counseling techniques, computer assisted career guidance or coursework where students can receive information upon which to base their career and course selections seem essential. One alternative for each school would be to offer a vocational exploratory or pre-employment course--a practice that was reported not readily utilized and considered to be "somewhat important".

Another point of consideration regarding career guidance is that over half (63%) of the students indicated receiving more encouragement to pursue college preparatory classes and half (47%) had been advised to enroll in vocational courses. The source of advisement for college preparatory classes was not determined by the survey instrument. However, advisement for vocational classes was attributed to counselors less than one-third of the time. Parents were credited for advisement about 30% of the time. If students are advised most often by counselors and parents, it is critical that these people are informed about vocational education programs so that students receive correct and unbiased information.

Teachers were credited for advisement only 10% of the time. Assuming this is an accurate assessment of teacher recruitment activity, a recommendation from this study would be to have teachers increase their recruitment efforts. One administrator indicated that although teachers were concerned that increased graduation requirements had resulted in decreased vocational enrollments, teachers had not taken a proactive stance to reduce these possible effects. Increased recruitment efforts may be one of those measures that can

easily be initiated.

Reasons for not Enrolling in Vocational Courses. Students who completed the surveys were identified as either vocational or nonvocational. Nonvocational students (52%) were asked why they did not enroll in vocational courses. Lack of interest and not enough time were the reasons most frequently stated. The survey did not identify reasons for lack of interest. Types of offerings and the career and personal interests of students should be reviewed in detail on a school by school basis. Information gathered may be beneficial for program planning. Because attitudes toward vocational students appear to be positive it can be assumed that negative attitudes may not be a deterrent to student enrollment. Therefore, schools should determine if present vocational courses are meeting students interests. More extensive course offerings or a different emphasis in present course offerings could be evaluated as possible means to meet student interests.

Although reasons for lack of time were not identified, one assumption is that this may be the result of increased graduation requirements--increases that have occurred over the last five years according to 97% of the teachers and administrators. According to survey results, some schools have increased the number of periods in the school day to enhance student accessibility to courses. Another issue that needs to be addressed is whether scheduling does allow a student to enroll in more classes or whether work, home responsibilities, or extra-curricular activities are the real time issue.

If students do have the desire to take vocational courses but are unable because of heavy academic loads, then schools should consider the practice of allowing academic credit earned for vocational course offerings to be substituted for math and science courses. In the study, non-vocational students did indicate an interest in enrolling in vocational courses if these credits fulfilled requirements in academic areas. Another alternative for students who reported having inadequate time for vocational courses is to consider offering vocational courses during the summer. Cooperative work experience or field based learning with school credit and wages may be incentives to enroll in summer programs. Other school practices to alleviate the time crunch would be to increase the number of periods per school day and allow students to test out of required courses. A small percentage of teachers and administrators reported these practices to be presently utilized.

Plans After High School. A total of 61% of the students indicated plans to attend a four year college after high school. Parents' desire to have students attend college may influence the students goals to attend college, but college preparation is not always essential for jobs that will be available. The Bureau of Labor Statistics has stated that of the current group of college students, one in five will graduate and work in a job that requires no college education. By the year 2000, the Bureau of Labor Statistics has also predicted that 88% of the available jobs will not require a four year college education. Projected labor force demands will require workers with specific technical and vocational skills rather than a college education.

Reasons for Enrolling in Vocational Courses. High school vocational students appear to be aware of the benefits of vocational education. When asked what most influenced them to take vocational education courses, in addition to indicating an interest in vocational classes, approximately one third of the students also viewed high school vocational courses as preparation for jobs after high school as well as future educational pursuits. Parents perceived attainment of vocational skills as a means to finance future education. Both parents and students also agreed that vocational education was a means to acquire essential skills for employment and everyday living.

Student satisfaction with vocational courses was indicated by their ratings. Vocational courses were viewed to be more interesting by approximately 64% of the students. Over half of the students (57%) learned more or much more in vocational courses as compared to other high school courses.

Adequacy of Vocational Education. Since many parents are assuming the role of advisor for vocational courses, their perceptions about the adequacy of the schools in meeting vocational education purposes are crucial. Half of the parents felt schools were doing adequately, fair, or very well in meeting the purposes of vocational education. Comments from the surveys that may account for less than adequate ratings suggest that parents feel (1) there is too much emphasis on academics; (2) vocational programs could be improved through the expansion of course content and the number of offerings; (3) vocational program equipment should be updated; and (4) student placement or guidance was not sufficient to help students identify career interest or to direct students into necessary courses for vocational preparation.

School Policies to Support Vocational Offerings. The procedures utilized by school districts to set and determine policies for making decisions about occupational course offerings was not determined in this study. However, teachers viewed themselves as having little authority in making decisions. Teachers felt that administrators' attitudes toward vocational education and graduation requirements were the most influential in determining course or program offerings. Teachers and administrators disagreed about the role that student interest played in making decisions relative to determining specific vocational courses that should be offered.

Two different discrepancies in survey results may be clarified through school district team meetings and discussion. It is not clear whether teachers viewed administrators as having positive or negative attitudes toward vocational education. However, teachers were of the opinion that administrator attitudes were critical in making program decisions. The other point that needs clarification is how much does student interest play in determining program or course offerings. Administrators and teachers perceived student interest as receiving different amounts of consideration. How student interest and needs are assessed to determine occupational interest and course needs may be an essential first step in positive program planning.

Increasing Access to Vocational Programs. Schools reported using a variety of practices to encourage student accessibility to vocational courses. The most common practices were offering vocational courses for academic credit and summer school offerings. The study suggests that schools are exerting less effort in utilizing other methods. Practices including competency testing, testing out of required classes, adjusting time allotments for vocational courses, flexible scheduling, increasing the number of school periods and student incentives were reported utilized by fewer schools.

Graduation requirements and attitudes toward vocational education were seen by administrators and teachers to have negative effects on vocational enrollments. Parents' comments also supported this as drawbacks to student enrollments. Implications from parents were that some students did not have time to take classes other than the academics and that vocational students should be made to feel that their pursuits were equally important to the goals of the college bound student.

A majority of the teachers and administrators considered student interest and teaching skills to have positive influence on enrollments. Other factors

believed to contribute to increased enrollments were community and parental involvement and course work reflecting the job market. Local, state, and federal funding and course/career advisement were selected by fewer respondents to have positive effects on enrollments. Some parents were critical of course/career advisement stating that it was not adequate in reaching the students who needed vocational education. Some parents felt that students were given little guidance in determining vocational aptitudes, interest, or necessary preparation for the world of work. Other parent comments, which may or may not be related to funding are those regarding the need for more sequential courses, and courses covering broader assortment of careers.

School Trends. The study identified the frequency that each school district utilized specific vocational education trends within the schools. Administrators and teachers indicated that each of the trends made "important" or "very important" contributions to the success of a vocational program. The average frequency rate for the following trends--teaching for entry level positions in employment, providing equal access for males and females, recruitment efforts, teachers' opportunity to update occupational and teaching skills, and availability of coop work experience or field based learning were reported on an average to occur sometimes in the schools.

Other trends such as articulation with the business community, post-secondary institutions and between vocational teachers and counselors were reported as occurring less often. "Selling" vocational education or articulation through appropriate channels is critical to program planning and recruitment. Competency testing was utilized infrequently by schools. One fourth of the respondents indicated this never happened. Theoretically, placing individuals at the appropriate level of learning would make school more challenging and meaningful to each student.

Career Information. Teachers and administrators as a group indicated that career information given to students was not likely to occur often. Students vary substantially in their knowledge of the career decision making process. Career choices are based on a student's translation of their attitudes towards self and the working world. Although self understanding and perceptions about work are essential, it is equally important to have accurate and realistic information about the career opportunities.

Exploratory occupational courses, counselor group techniques, computer assisted guidance, and the immersion of career concepts into the general and

academic curriculum were reported by most respondents to occur sometimes or rarely. Schools must arrange conditions and counselors must assume leadership in the acquisition of knowledge, attitudes and skills for employment. Parent comments indicated concern that students were getting minimum career information and course advisement as well.

Perceptions About Vocational Education. A comparison of teacher and administrators' perceptions about vocational education indicates differences of opinion among the individual school districts. A comparative summary of these individual school differences are enumerated below.

Washoe County respondents show stronger support for:

1) occupational education accepting responsibility for the development of communication and computational skills, and
2) the statement that increased graduation requirements has decreased occupational enrollments.

Carson City respondents more than the other school districts felt that:

1) student achievement standards for occupational classes are high;
2) the statement that increased graduation requirements had decreased occupational enrollments; and
3) community resources allow students on the job experience directly related to school occupational education programs.

Clark County respondents reported greater support than the other school districts for:

1) extended contracts for vocational teachers, and
2) tracking students into occupational education to decrease drop-out rates.

Both Northern school district respondents more than Clark County respondents perceived:

1) students getting more encouragement to enter college preparatory classes than vocational courses, and
2) occupational courses providing students with vocational preparation in many fields.

RECOMMENDATIONS

The following recommendations are warranted from the study:

1) Policies for determining program and course offering should be evaluated at the district level. A policy allowing teacher input is essential.
2) Vocational teachers and administrators need to articulate how administrators' attitudes and student interest play a part in program planning.
3) Individual school assessment of current methods utilized to improve student accessibility should be reviewed. Many methods such as competency testing, testing out of required classes, increasing the number of periods per school day, flexible scheduling and student incentives could be utilized more frequently.
4) Course content and focus of present vocational courses should be assessed for assurance that present vocational offerings match student needs and interests. This may be done cooperatively with vocational counselors to receive input regarding student aptitudes and career guidance efforts.
5) School district personnel should create an awareness of vocational education through concentrated public relations activities which educate parents, students, and community in general about the benefits of vocational education.
6) Vocational guidance must be increased so that students enroll in courses based on vocational goals and aptitude.
7) Teachers should be encouraged to actively recruit students.
8) School curriculum should focus on the importance of interrelatedness of vocational and academic coursework.

APPENDIX A

Letters for District Approval

UNIVERSITY OF NEVADA-RENO

Deborah Loesch-Griffin
Director

Research & Educational Planning Center
College of Education
University of Nevada-Reno
Reno, Nevada 89557-0096
(702) 784-4921

March 9, 1988

Don Jenny
Carson City School District
P. O. Box 603
Carson City, NV 89702

Dear Mr. Jenny:

The Research and Educational Planning Center, College of Education, will be conducting two surveys for the State Department of Education this spring. The purposes of the individual surveys will be to determine: 1) factors which contribute to declining occupational education enrollments and 2) what classes and coursework with family life skills content are presently being taught in the school curriculum.

The survey to determine causal factors affecting occupational enrollments will require on-site visitations with secondary school personnel including building principals, vocational directors, vocational educators, and a sample of students. We will call individual school principals to arrange for the site surveys.

We will conduct the second survey by mail and send it to administrators and those people who have been identified as teaching courses containing family life concepts.

Please alert your school administrators about the surveys. Both surveys will begin the latter part of March. Your support in helping us conduct these surveys will be appreciated.

If you have any questions regarding the surveys, please contact myself or Deborah Loesch-Griffin at 784-4921.

Sincerely,

Eunice Foldesy
Research Consultant

EF:pmd

UNIVERSITY OF NEVADA-RENO

Deborah Loesch-Griffin
Director

Research & Educational Planning Center
College of Education
University of Nevada-Reno
Reno, Nevada 89557
(702) 784-6521

March 9, 1988

Mr. Dennis Graham
425 E. 9th Street
Reno, NV 89520

Dear Mr. Graham:

The Research and Educational Planning Center, College of Education, will be conducting two surveys for the State Department of Education this spring. The purposes of the individual surveys will be to determine: 1) factors which contribute to declining occupational education enrollments and 2) what classes and coursework with family life skills content are presently being taught in the school curriculum.

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If you have any questions regarding the surveys, please contact myself or Deborah Loesch-Griffin at 784-4921.

Sincerely,

Eunice Foldesy
Research Consultant

EF:pmd

UNIVERSITY OF NEVADA-RENO

Deborah Loesch-Griffin
Director

Research & Educational Planning Center
College of Education
University of Nevada-Reno
Reno, Nevada 89557-0005
(702) 784-6921

March 9, 1988

Ward Gubler
Clark Co. School District
2832 East Flamingo
Las Vegas, NV 89121

Dear Mr. Gubler:

The Research and Educational Planning Center, College of Education, will be conducting two surveys for the State Department of Education this spring. The purposes of the individual surveys will be to determine: 1) factors which contribute to declining occupational education enrollments and 2) what classes and coursework with family life skills content are presently being taught in the school curriculum.

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Please alert your school administrators about the surveys. Both surveys will begin the latter part of March. Your support in helping us conduct these surveys will be appreciated.

If you have any questions regarding the surveys, please contact myself or Deborah Loesch-Griffin at 784-4921.

Sincerely,

Eunice Foldesy
Research Consultant

EF:pmd

APPENDIX B

Sample Selection Data

APPENDIX B

SAMPLE SELECTION DATA

SCHOOL	7TH MONTH ENROLLMENT (10-12)	STUDENT SAMPLE 10	11	12	TOTAL	PARENT	TEACHER	ADMIN-ISTRATOR
Carson	1300	22	21	25	68	18	10	2
Hug	868	21	15	32	68	12	7	1
Wooster	1086	33	24	33	91	29	9	1
McQueen	855	13	14	12	39	10	7	2
Reed	1360	21	23	31	75	22	8	1
Reno	1039	28	17	25	71	22	1	1
Sparks	945	25	26	24	75	12	7	2
Washoe	317	8	11	6	25	3	1	1
Occupational Center	200	0	2	9	11	3	0	0
Gerlach	26	2	2	2	6	5	3	1
Valley	2522	32	47	41	120	24	7	0
ATTC	272	0	17	14	32	13	8	1
Bonanza	1709	25	20	29	74	16	3	1
Chaparral	1636	22	23	26	70	19	0	0
Clark	2310	27	23	40	92	19	8	2
Eldorado	1093	29	10	0	40	6	10	2
Indian Springs	74	3	3	4	10	2	3	1
Las Vegas	1533	12	30	15	57	11	8	2
Moapa Valley	297	23	21	15	59	11	4	2
Rancho	1823	41	53	51	147	17	15	2
SNVTC	1249	17	22	21	60	12	14	1
Sunset	178	2	3	3	8	7	5	1
Virgin Valley	140	2	5	5	12	4	4	2
Western	2363	55	41	35	131	34	6	0

APPENDIX C

Student Surveys

Vocational Education Survey
Student Questionnaire

Dear Student:

A survey is being conducted to gather information from students about vocational education in Washoe County. Your responses to the questions on the following pages will be greatly appreciated.

A. What school do you attend: _____

B. Check one: 1._____ male 2._____ female

C. Grade level: _____10 _____11 _____12

D. Check the one response that best states your opinion about what the purpose of vocational education should be (choose only one):

1. _____To give students an opportunity to explore certain occupational fields.

2. _____To give students general skills that can later be used at home or on the job.

3. _____To prepare students for employment in specific occupations.

4. _____To give students an alternative to academic classes.

5. _____To prepare students for vocational technical school after high school.

6. _____To prepare students for college.

7. _____Other (please explain): _____

_____

E. Would you recommend that all students take at least one vocational course during high school?

_____Yes _____No Why? _____

_____

F. Which statement best represents your opinion of students who take vocational courses (choose one)?

Students who take vocational courses . . .

1. _____will be better prepared for work in the future

2. _____will have a broader educational background

3. _____have less academic ability than students who do not take vocational courses

4. _____will not be as well prepared for college

5. _____there is no real difference between students who take vocational classes and those who do not

G. I get more encouragement to pursue college preparatory courses than vocational classes.

_____Yes _____No

H. Has anyone ever advised you about enrolling in vocational classes?

_____Yes _____No

I. If your answer to the previous question was "Yes", was that person (check one):

1. _____a teacher
2. _____a counselor
3. _____a principal
4. _____your parents
5. _____another student
6. _____other (specify) _____

J. Have you ever been discouraged from taking a vocational class?

_____Yes _____No

K. What are your plans after high school graduation?

1. _____get a job
2. _____attend a trade school
3. _____attend a community college
4. _____attend a four-year college
5. _____enlist in the military
6. _____other (specify) _____

L. If you decided <u>not</u> to take vocational classes while in high school, what <u>most</u> influenced your decision? (vocational students do not answer)

1. _____I did not know about vocational classes.
2. _____My parents were (are) against it.
3. _____I did not have enough time.
4. _____I was not interested.
5. _____ Someone at school (teacher, counselor) advised against it.

M. If you decided not to take vocational courses, would you enroll in a vocational course if it was (check one):

1. _____Offered for science credit.

2. _____Offered for math credit.

3. _____Offered during the summer months.

4. _____Offered after school hours.

N. If you have an idea of the occupation or career field you would like to enter after high school (or college), please list it here: _____

_____

_____

O. Have you taken a REQUIRED high school class which helped you learn about career choices?

_____Yes (please specify) _____

_____No

PLEASE ANSWER THE REMAINING QUESTIONS ONLY IF YOU HAVE TAKEN ONE OR MORE VOCATIONAL EDUCATION CLASSES WHILE ENROLLED IN HIGH SCHOOL.

P. Have you been a member of a vocational organization?
_____Yes _____No

If so was it beneficial to you? _____Yes _____No

Q. What most influenced you to take vocational classes?

1. _____My parents wanted me to take vocational classes.

2. _____A counselor, teacher, or principal advised me to take vocational classes.

3. _____I thought that it would be easier to get a job after graduation if I took vocational classes.

4. _____I wanted to get out of taking other classes.

5. _____I thought they would help prepare me for college.

6. _____I was interested in vocational classes.

R. When you compare your vocational class(es) to most other high school classes, how would you rate them? (circle one for each.)

	1	2	3	4	5
Difficulty	Much Easier		About the Same		Much More Difficult
Interest	Much Less Interesting		About the Same		Much Interesting
Learning	I Learned Much Less		I Learned About the Same		I Learned A Lot More

APPENDIX D

Parent Surveys

VOCATIONAL EDUCATION SURVEY

Parent Questionnaire

NOTE: If you have more than one child, please respond to questions only in terms of the student whose name appears on the envelope in which this survey was mailed. This survey may be filled out by either parent.

A. What is the name of the school your child attended this past year?

_____

B. Is your child: 01___Male 02___Female

C. Place a check next to the grade in which your child was enrolled this past school year.

10th _____ 11th _____ 12th _____

D. Check the highest level of education you completed:

01___less than 8th grade	05___trade or vocational school
02___8th grade	06___community college
03___1-3 years high school	07___1-3 years university
04___high school graduate	08___university graduate

E. Check the <u>one</u> response that best states the <u>primary emphasis</u> schools should be placing on vocational education.

1. ___ to give students an opportunity to explore certain occupational fields
2. ___ to give students general skills that can later be used at home or on the job
3. ___ to prepare students for employment in <u>specific</u> occupations
4. ___ to give students an alternative to academic classes
5. ___ to prepare students for vocational technical school after high school
6. ___ to prepare students for college
7. ___ other (Please explain):_____

_____

_____

_____

F. Would your recommend that every student take at least one vocational course during high school? _____Yes ___No Why? _____

_____

G. In the previous question, you indicated what you thought the schools should be emphasizing most in vocational education. Now, please tell us how well you think the schools are now meeting that primary emphasis for vocational programs:

1. ____ very well
2. ____ fairly well
3. ____ adequately
4. ____ poorly
5. ____ very poorly
6. ____ no opinion/don't know

Comment if you wish: _____

_____

_____

_____

H. Check the statement that best represents how you feel about your own child's participation in vocational classes as currently offered by the school district:

1. ____ My child will (did) need the training to start a job after completing high school.
2. ____ Vocational education will give (gave) my child a broader educational experience.
3. ____ I want (wanted) my child to take as many academic classes as possible during high school without other classes taking time away from academics.
4. ____ My child has preparation for a professional career ahead and vocational education is not (was not) appropriate for him or her.
5. ____ My child is going on for additional schooling or training after high school, and vocational education taken during high school will help him/her find a better paying job to finance that education or training.
6. ____ I feel that some vocational education during high school is (was) appropriate for my child to provide skills for use in everyday life or the world of work.
7. ____ Vocational education for my child requires a more in-depth program than that now offered by high schools.
8. ____ Other (please explain): _____

_____

_____

_____

I. Which statement best represents your opinion of students who take vocational courses in high school (choose one):

Students who take vocational courses . . .

1. ____ will be better prepared for work in the future.
2. ____ will have a broader educational background.
3. ____ have less academic ability than students who do not take vocational courses.
4. ____ will not be as well prepared for college.
5. ____ There is no real difference between students who take vocational classes and those who do not.

J. PERCEPTIONS ABOUT VOCATIONAL EDUCATION

Below are some statements about Vocational Education. Please respond to each of these statements by circling the number representing your perception.

1-Strongly Disagree 2-Disagree 3-Undecided 4-Agree 5-Strongly Agree

1.	Vocational education should be required for those who don't go to college.	1	2	3	4	5
2.	Students should be allowed to satisfy high school graduation requirements with selected courses in vocational education.	1	2	3	4	5
3.	Males and females have equal access to and are recruited for vocational course offerings.	1	2	3	4	5
4.	Students get more encouragement to pursue college preparatory couses than vocational classes.	1	2	3	4	5
5.	Courses that are labeled "occupational" can provide vocational preparation for students who work in many fields.	1	2	3	4	5
6.	Graduation requirements should be double-tracked to accomodate college and vocational-bound students.	1	2	3	4	5
7.	Vocational courses should be offered in the summer.	1	2	3	4	5
8.	Tracking students with vocational education programs would decrease drop-out rates.	1	2	3	4	5
9.	Vocational education should be required for high school students.	1	2	3	4	5

THANK YOU FOR YOUR HELP WITH THIS SURVEY!

APPENDIX E

Teacher Surveys

VOCATIONAL EDUCATION ENROLLMENTS

TEACHERS QUESTIONNAIRE

I. Please check the highest degree earned:

_____ Bachelors _____ Masters

II. What type of teacher certification do you hold? _____

_____

III. Indicate your years of teaching experience (to the closest whole year) by checking the appropriate category.

_____ 0-2 _____ 3-5 _____ 6-8

_____ 9-11 _____ More than 11

IV. Indicate the number of years that you have taught occupational education.

_____ 0-2 _____ 3-5 _____ 6-8

_____ 9-11 _____ More than 11

V. Please check the vocational area in which you teach:

_____ Agriculture _____ Home Economics Related Occupations

_____ Business _____ Industrial Arts

_____ Marketing _____ Pre-Occupational Employment Skills

_____ Home Economics _____ Trade & Industry

VI. Do your responsibilities include teaching vocational courses full-time or part-time? Please indicate below.

_____ Full-time _____ Part-time

VOCATIONAL EDUCATION ENROLLMENTS

TEACHERS SURVEY

School _____ Name _____

County _____ Position _____

I. GRADUATION REQUIREMENTS

1. Has your school district increased high school graduation requirements the past five years? Yes ____ No ____

   If yes, does the increased requirements reflect only the changes recommended from the State Department of Education?
   Yes ____ No ____

   If no, what were the district's recommended increases?

   _____

2. Has concern been expressed by your school board, administrator(s), or faculty to change present graduation requirements to reduce the difficulty for students to enroll in occupational courses?
   Yes ____ No ____

3. With the present school district policy, who has the authority in making decisions about occupational course offerings?
   Check all that apply:

   _____ School board
   _____ Superintendent
   _____ Principal
   _____ Vocational director
   _____ Teacher
   _____ Other

4. When decisions are made about vocational course offerings in your school district, what considerations are the most influential in determining course or program offerings. Please rank the factors on a 1-6 scale with 1 being the most important.

   _____ Attitudes of administrators toward vocational education
   _____ Academic graduation requirements
   _____ Available funds
   _____ Flexibility in staffing the vocational course or program
   _____ Student interest
   _____ Availability of teachers

II. STUDENT ACCESS TO OCCUPATIONAL COURSES

Listed below are some alternative ways to allow students to enroll in occupational courses and still meet the increased academic requirements for graduation. Please check those which are being utilized in your school district.

_____ Using vocational courses for a portion of science, math, or English requirement

_____ Competency testing

_____ Summer course offerings

_____ Offering classes outside the regular school hours

_____ Testing out of required courses

_____ Increasing the number of periods per school day

_____ Changing time allottment for course offerings (i.e., semester courses vs. year courses; 1 hour vs. 3 hours)

_____ Flexible scheduling

_____ Student incentives (e.g., certificates of achievement, recognition by employers)

_____ Others. Please specify: _____

III. OCCUPATIONAL ENROLLMENT FACTORS

Listed below are selected factors that affect occupational enrollments positively or negatively. Please mark each factor with a + (positive effect on enrollments) or a - (negative effect on enrollments). Then determine the degree of influence each factor has on occupational enrollments in your school or school district.

1-no influence
2-slight influence
3-moderate influence
4-considerable influence
5-great influence

Factor	Positive or Negative		Degree of Influence				
Student Interest	+	-	1	2	3	4	5
Graduation Requirements	+	-	1	2	3	4	5
Local Funding	+	-	1	2	3	4	5
State Funding	+	-	1	2	3	4	5
Federal Funding	+	-	1	2	3	4	5
Teacher Occupational & Teaching Skills	+	-	1	2	3	4	5

Attitudes toward Vocational Education	+	-	1	2	3	4	5
Occupational Education Course Offerings Reflect Job Market	+	-	1	2	3	4	5
Parental Support	+	-	1	2	3	4	5
Community Involvement	+	-	1	2	3	4	5
Course/Career Advisement	+	-	1	2	3	4	5
Availability of teachers for employment	+	-	1	2	3	4	5
Other factors Please list:	+	-	1	2	3	4	5

_____

_____

IV. TRENDS IN OCCUPATIONAL EDUCATION

Below are some statements about Occupational Education. For each statement, indicate the frequency it occurs in your school district by circling one of the numbers. Please use the code listed below and respond to all statements. Rate how important each item is to the success of your occupational program.

Frequency Rating = 1-Never 2-Rarely 3-Sometimes 4-Often 5-Always

Importance Rating = 1-not important 2-somewhat important 3-very important

	Frequency					Importance to Program		
1. Articulation between business, labor, and industry to determine curriculum objectives and program goals	1	2	3	4	5	1	2	3
2. Articulation efforts between high school and post secondary institutions	1	2	3	4	5	1	2	3
3. Articulation between occupational educators and counselors	1	2	3	4	5	1	2	3
4. Recruitment efforts by occupational education teachers	1	2	3	4	5	1	2	3
5. Availability of cooperative work experience or field-based learning for students	1	2	3	4	5	1	2	3
6. Career concepts immersed in general and academic course offerings	1	2	3	4	5	1	2	3

7.	Counselor's use of group techniques and computer-assisted guidance for career education	1	2	3	4	5		1	2	3
8.	Exploratory occupational programs offered to assist students in career decisions	1	2	3	4	5		1	2	3
9.	Occupational courses teach entry-level positions	1	2	3	4	5		1	2	3
10.	Teachers have available opportunities to update these occupational and teaching skills	1	2	3	4	5		1	2	3
11.	Males and females have equal access to and are recruited for occupational course offerings	1	2	3	4	5		1	2	3
12.	Alternative placement in course curriculum through competency assessment	1	2	3	4	5		1	2	3

V. PERCEPTIONS ABOUT OCCUPATIONAL EDUCATION

Below are some statements about Occupational Education. Please respond to each of these statements by circling the number representing your perception.

1-Strongly Disagree 2-Disagree 3-Undecided 4-Agree 5-Strongly Agree

12.	Occupational education should be concerned with the development of communication and computational skills	1	2	3	4	5
13.	Students' academic skills will improve while enrolled in occupational education courses	1	2	3	4	5
14.	School curriculum should give students an opportunity to integrate skills and knowledge across academic and occupational courses (interrelatedness of ideas)	1	2	3	4	5
15.	Students should be allowed to satisfy high school graduation requirements with selected courses in occupational education	1	2	3	4	5
16.	Student achievement standards for occupational classes are high	1	2	3	4	5
17.	Increased graduation requirements has decreased occupational enrollments	1	2	3	4	5
18.	School districts should provide inservice for <u>all</u> teachers about occupational education	1	2	3	4	5
19.	Students get more encouragement to pursue college preparatory courses than occupational classes	1	2	3	4	5

20.	Vocational organizations are beneficial to the total education of students	1	2	3	4	5
21.	Courses that are labeled "occupational" can provide vocational preparation for students who will work in many fields	1	2	3	4	5
22.	<u>All</u> students in your school district are provided counseling and guidance in career choices, labor supply and demand information, and promotion opportunities	1	2	3	4	5
23.	Graduation requirements should be double-tracked to accomodate college and vocational-bound students	1	2	3	4	5
24.	School districts should provide extended contracts for vocational teachers	1	2	3	4	5
25.	Community resources allow students' on-the-job experience to be directly related to in-school occupational education program	1	2	3	4	5
26.	Tracking students into occupational education programs would decrease drop-out rate	1	2	3	4	5
27.	Cooperative occupational education should be an integral part of every occupational program	1	2	3	4	5

Additional Comments:

Thank you for helping with this survey!

A P P E N D I X F

Administrator surveys

VOCATIONAL EDUCATION ENROLLMENTS

ADMINISTRATORS SURVEY

School _____ Name _____

County _____ Position _____

I. GRADUATION REQUIREMENTS

1. Has your school district increased high school graduation requirements the past five years? Yes ____ No ____

   If yes, does the increased requirements reflect only the changes recommended from the State Department of Education?
   Yes ____ No ____

   If no, what were the district's recommended increases?

   _____

2. Has concern been expressed by your school board, administrator(s), or faculty to change present graduation requirements to reduce the difficulty for students to enroll in occupational courses?
   Yes ____ No ____

3. With the present school district policy, who has the authority in making decisions about occupational course offerings?
   Check all that apply:

   _____ School board
   _____ Principal
   _____ Teacher
   _____ Superintendent
   _____ Vocational director
   _____ Other

4. When decisions are made about vocational course offerings in your school district, what considerations are the most influential in determining course or program offerings. Please rank the factors on a 1-6 scale with 1 being the most important.

   _____ Attitudes of administrators toward vocational education
   _____ Academic graduation requirements
   _____ Available funds
   _____ Flexibility in staffing the vocational course or program
   _____ Student interest
   _____ Availability of teachers

II. STUDENT ACCESS TO OCCUPATIONAL COURSES

Listed below are some alternative ways to allow students to enroll in occupational courses and still meet the increased academic requirements for graduation. Please check those which are being utilized in your school district.

_____ Using vocational courses for a portion of science, math, or English requirement

_____ Competency testing

_____ Summer course offerings

_____ Offering classes outside the regular school hours

_____ Testing out of required courses

_____ Increasing the number of periods per school day

_____ Changing time allottment for course offerings (i.e., semester courses vs. year courses; 1 hour vs. 3 hours)

_____ Flexible scheduling

_____ Student incentives (e.g., certificates of achievement, recognition by employers)

_____ Others. Please specify: _____

III. OCCUPATIONAL ENROLLMENT FACTORS

Listed below are selected factors that affect occupational enrollments positively or negatively. Please mark each factor with a + (positive effect on enrollments) or a - (negative effect on enrollments). Then determine the degree of influence each factor has on occupational enrollments in your school or school district.

1-no influence 3-moderate influence
2-slight influence 4-considerable influence
5-great influence

Factor	Positive or Negative		Degree of Influence				
Student Interest	+	-	1	2	3	4	5
Graduation Requirements	+	-	1	2	3	4	5
Local Funding	+	-	1	2	3	4	5
State Funding	+	-	1	2	3	4	5
Federal Funding	+	-	1	2	3	4	5
Teacher Occupational & Teaching Skills	+	-	1	2	3	4	5

Attitudes toward Vocational Education	+	-	1	2	3	4	5
Occupational Education Course Offerings Reflect Job Market	+	-	1	2	3	4	5
Parental Support	+	-	1	2	3	4	5
Community Involvement	+	-	1	2	3	4	5
Course/Career Advisement	+	-	1	2	3	4	5
Availability of teachers for employment	+	-	1	2	3	4	5
Other factors Please list:	+	-	1	2	3	4	5

_____

_____

IV. TRENDS IN OCCUPATIONAL EDUCATION

Below are some statements about Occupational Education. For each statement, indicate the frequency it occurs in your school district by circling one of the numbers. Please use the code listed below and respond to all statements. Rate how important each item is to the success of your occupational program.

Frequency Rating = 1-Never 2-Rarely 3-Sometimes 4-Often 5-Always

Importance Rating = 1-not important 2-somewhat important 3-very important

	Frequency					Importance to Program		
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4. Recruitment efforts by occupational education teachers	1	2	3	4	5	1	2	3
5. Availability of cooperative work experience or field-based learning for students	1	2	3	4	5	1	2	3
6. Career concepts immersed in general and academic course offerings	1	2	3	4	5	1	2	3

7.	Counselor's use of group techniques and computer-assisted guidance for career education	1	2	3	4	5		1	2	3
8.	Exploratory occupational programs offered to assist students in career decisions	1	2	3	4	5		1	2	3
9.	Occupational courses teach entry-level positions	1	2	3	4	5		1	2	3
10.	Teachers have available opportunities to update these occupational and teaching skills	1	2	3	4	5		1	2	3
11.	Males and females have equal access to and are recruited for occupational course offerings	1	2	3	4	5		1	2	3
12.	Alternative placement in course curriculum through competency assessment	1	2	3	4	5		1	2	3

V. PERCEPTIONS ABOUT OCCUPATIONAL EDUCATION

Below are some statements about Occupational Education. Please respond to each of these statements by circling the number representing your perception.

1-Strongly Disagree 2-Disagree 3-Undecided 4-Agree 5-Strongly Agree

12.	Occupational education should be concerned with the development of communication and computational skills	1	2	3	4	5
13.	Students' academic skills will improve while enrolled in occupational education courses	1	2	3	4	5
14.	School curriculum should give students an opportunity to integrate skills and knowledge across academic and occupational courses (interrelatedness of ideas)	1	2	3	4	5
15.	Students should be allowed to satisfy high school graduation requirements with selected courses in occupational education	1	2	3	4	5
16.	Student achievement standards for occupational classes are high	1	2	3	4	5
17.	Increased graduation requirements has decreased occupational enrollments	1	2	3	4	5
18.	School districts should provide inservice for <u>all</u> teachers about occupational education	1	2	3	4	5
19.	Students get more encouragement to pursue college preparatory courses than occupational classes	1	2	3	4	5

20.	Vocational organizations are beneficial to the total education of students	1	2	3	4	5
21.	Courses that are labeled "occupational" can provide vocational preparation for students who will work in many fields	1	2	3	4	5
22.	<u>All</u> students in your school district are provided counseling and guidance in career choices, labor supply and demand information, and promotion opportunities	1	2	3	4	5
23.	Graduation requirements should be double-tracked to accomodate college and vocational-bound students	1	2	3	4	5
24.	School districts should provide extended contracts for vocational teachers	1	2	3	4	5
25.	Community resources allow students' on-the-job experience to be directly related to in-school occupational education program	1	2	3	4	5
26.	Tracking students into occupational education programs would decrease drop-out rate	1	2	3	4	5
27.	Cooperative occupational education should be an integral part of every occupational program	1	2	3	4	5

Additional Comments:

Thank you for helping with this survey!

APPENDIX G

Primary Emphasis of Vocational Education

APPENDIX G

PRIMARY EMPHASIS OF VOCATIONAL EDUCATION

PARENTS' EXPLANATIONS

1) To give students specific skills in problem-solving, job interviewing, effective communication, and assertiveness training.....these are needed to do any job successfully.

2) To prepare students for an occupation, the opportunity to explore different occupations but also give them good basis in subjects like math which are essential for everyday living.

3) Students who desire vocational training should be offered vocational classes throughout their high school years.

4) It is a mistake to consider eliminating vocational courses with the increase in Nevada graduation requirements. I think the drop out rate would go up!

5) Not all students want to go to college so should be given another opportunity.

6) A grounding or base, for an occupation and knowledge about the world and society would be the perfect education -- Are both too hard to accomplish?

7) Put emphasis on reading, spelling, and math. Teach students how to make out income tax forms, job applications, check books. Also give lessons on saving money, investing, not getting into debt by buying everything they want.

8) ...students should be prepared for life in general. Both in careers and personal life. Help kids learn independence and responsibility.

9) To prepare students for college is ....college bound only. Give others the opportunity to succeed in their choice.

10) To prepare them for employment and skill they will need later in life...if they aren't able to continue their education after graduating.

11) To be able to function as a responsible adult in our society taking care of self and a family.

12) Vocational classes should be available for those students who are not going onto college or pursuing a professional career, or for those who need to work while going to college.

APPENDIX G, CONTINUED
PARENTS' EXPLANATIONS CONTINUED

13) Students in so-called college-prep program miss the point of vocational programs as useful, practical classes and a required 2 class structured into the program would integrate that program.

14) To offer a varied curriculum - college prep, vocational, and alternative - so more students will pursue a high school diploma.

15) All responses (purposes listing on survey instrument) should be taken under consideration as they all fit the need to have students take vocational classes.

16) First test students to see what their strong areas are -- then steer them to fields that will be interesting and challenging and geared to their interests -- hence careers in those areas.

17) Voc. Ed. is an excellent alternate means for teaching students to think; with this ability, the student will succeed in any area of his choice.

APPENDIX H

Adequacy of Vocational Education Parents' Comments

APPENDIX H

ADEQUACY OF VOCATIONAL EDUCATION

PARENTS' COMMENTS

1) In Germany, children finish 8th grade and are placed in chosen apprenticeship programs for the next 4 years and only attend high school part time. At least they learn a trade.

2) There is not enough information present to "student" or "parents" to draw interest in vocational programs available.

3) I think in this day and age aptitude or career interest test should be administered early then guidance should be given to help the kids in the right direction.

4) Not enough emphasis placed on why the course is needed and an academic student usually doesn't have a free period to take one.

5) Our child does very well academically, therefore, we have not given much attention to vocational programs.

6) Since the majority of students do not attend college and do not have the aptitude for college, I feel that an increased emphasis on vocational education will better prepare and motivate them for future gravity.

7) There should be more than reading writing and arithmetic, my son plans to go to college, but I think a broader educational programs would help keep kids in school. I also think kids should go to school longer.

8) (School's name) is not giving the general student training in any field. They emphasis (sic) in major subjects which does not help the students that are not attending college.

9) One of the reasons I wish H. S. insisted upon a student taking 65 classes a day until graduation is that the children need to be exposed to more subjects. If they had to go a full day they might take a few vocational classes even though they planned to go to college.

10) I believe that non-college bound students should be separated from college bound students and in their own schools. The district should have many "voc-techs." I am a teacher in the district and when I teach classes that contain both college bound and non-college bound students, I find that I don't meet the needs of either.

I give too much writing and too sophisticated reading to the job-oriented child, while the college bound child needs even more than I give. I'm forced to "shoot for the middle," thereby reaching very few.

11) Need more emphasis.

12) They (schools) are just meeting standards.

13) Not every student should go to college, vocational education should be encouraged and be made more acceptable in society. We need to promote vocational education and not make the person feel inferior or less capable than the college bound person.

14) I'm referring to such subjects as: 1) how to balance a check book -- budget -- buy insurance; 2) basics of home constructions and maintenance and improvements; 3) changing oil in cars, fixing flat tires, jumping a battery,etc.

15) A general program should be installed at junior high level and built up on through high school.

16) Too much emphasis has been directed towards the 'creation' of classes which have little or no potential impact on future success or monetary renumeration (enumeration) Emphasis should be placed on the academic dollar addressing societies functional educational opportunities.

17) With present requirements I don't know how they (schools) can do differently.

18) Too many students are graduating from high school with no idea of their future.

19) With our experience there was not much direction or help at the junior high level when the children could start to look into fields for life ... if the school system offered that, the vocational classes would be more important to a great amount of young adults.

20) I have an 8th grader, a 12th grader and one that graduated 2 years ago. As far as I can see, these kids are going to have to go outside the .... School system to learn what they want to major in.

21) ... High School places too much emphasize on absenteeism. Not taking into consideration that a change of pace could make the difference.

APPENDIX H, CONTINUED
PARENTS' EXPLANATIONS

22) Vocabulary, public speaking and writing skills are limited. (However, emphasis on how to appear for an interview or fill out a job application the school has done well).

23) My child, although making excellent grades, will graduate with general knowledge useful if going on to higher education. She has not (acquired) specific skills for a career just like a student with poor grades.

24) I think many students would like an expanded vocational program with more varied areas of study.

25) Only picking high quality students or special ed. Sometimes others have a drastic need for a trade.

26) School counselors do not guide student properly!

27) There seems to be adequate choice -- could be more. Emphasis should be made to improve status of those choosing vocational ed. Too low.

28) We feel that there is too much emphasis on sports and weight training and not nearly as much in education.

29) Have no idea what vocational training is available at ... H.S.

30) Today's world is computerized and in our lower education, we offer almost nothing in this field.

31) Vocational classes in the average high school is an elective. We are turning out far too many graduates who only know how to pass a test or write short papers.

32) Two or three ideas I feel is they had some experience people to give ideas -- some on-hands experience would help.

33) Students were not allowed to take the same shop classes this year if they had them last year.

34) I am a firm believer that this area needs a trade or vocational school other than Job Corp or more vocational opportunities in H. S. for students who can't do well scholastically.

35) It is difficult for a H. S. course to have a great impact on the student since the vocational classes are limited in time, experience and training. Vocational classes can only be general at best.

36) I've seen little encouragement to develop interests or obvious skills via vocational application.

37) The classes offered in the arts, or shop as they are commonly called, prepare one to be a mechanic at best -- however there are hundreds of the vocations available .....

38) I don't think schools have changed too much since I went to school. Most curriculum does not prepare a lot for vocational jobs.

39) There are not vocational high schools in ... offering a full complement of vocational instruction leading to employment. Schools offer vocational training in fragments and general instruction.

40) High school is for basic academic skills, but some vocational skills should be offered for those not interested in college.

41) My daughter was tested (12th grade) this year to see which occupation she would be best at. Up until this time, she had not idea and no goals. Consequently, school was boring.

42) Work/study programs are valuable in keeping the students in school and able to graduate. Economically too many are in a position of having to work -- help them stay in school too!

43) Further emphasis should be placed on exploring a variety of vocational area. Our children are graduating after 12 years of schooling, without adequate knowledge of or training in the many possible vocational opportunities that exist.

44) The limited courses and training doesn't allow the children enough exposure to enable them to make an observation with substance.

45) The Building Assn. offers wonderful training in the building business in addition to awarding certificates and money to students in architecture, etc. Why isn't this program properly funded?

46) I feel there should be more emphasis placed on vocational courses because the largest percentage of the students don't go on to college but should learn skills that can help them in a job after high school or prepare them for a vocational technical school.

47) Students should be on a two track system after the 8th grade: one vocational, the other academic.

48) I feel students by 17 years old know in which direction they want to go --- college or vocation. There should be two sets of curriculum offerings — (not at art school, but one central school) to satisfy vocational trade.

49) My own schooling required a vocational course be taken for two years -- eight auto, printing, metal shop, electric shop or wood, during junior high.

50) School programs are pretending they're effective. There are only a handful of concentrated programs helping a handful of students. Students are not guided to vocational training. Classes offered are not geared to the average student. All C students aren't C students because they aren't trying. it's because they're average. There's plenty of program for the talented, they aren't the problem.

51) Considering the equipment the schools have to work with. Being employed in the human resources field I know as a fact that the machine shop classes have extremely poor and outdated equipment - I also think that the instructors in those classes need some assistance and direction , if money should become available to purchase new equipment, by the employment community as to what types of machines should be purchased.

52) School don't prepare you for the real world.

53) In some ares the curriculum is more than adequate, out in other areas, it is totally out of touch with reality, and constitutes a disservice to not only the student, but also to the community.

54) Only the vocational high schools are doing well. The regular high schools do very poorly in preparing the children for work.

55) A good way to keep a good update, would be to ask Jr. and Sr. 2 times a year what programs they would like to see explored. But I think you're doing a great job.

56) Student taking vocational classes should be encouraged and given as much recognition as those who excel academically as education comes in various ways to different people and each has different ways of learning.

57) Vocational secondary schools are not available to Carson

City students. The few vocational classes offered cannot prepare students for employment.

58) The opportunity to take vocational courses for those students who are considered "college prep" are limited in choices beyond meeting graduation requirements.

59) Vocational school (Voc-Tech in particular) not geared for honors students — general consensus amongst students -- the dumb ones end up going there -- 2 years ago they offered no honors classes!

60) I know that voc. ed. classes are much more expensive than academic classes to offer. I also know that these classes are the first to go in a budget crunch. Equipment is expensive and class sizes are very low depending in the equipment available.